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THE ASSESSMENT OF
PHYSICAL FITNESS
GEORGE DREYER

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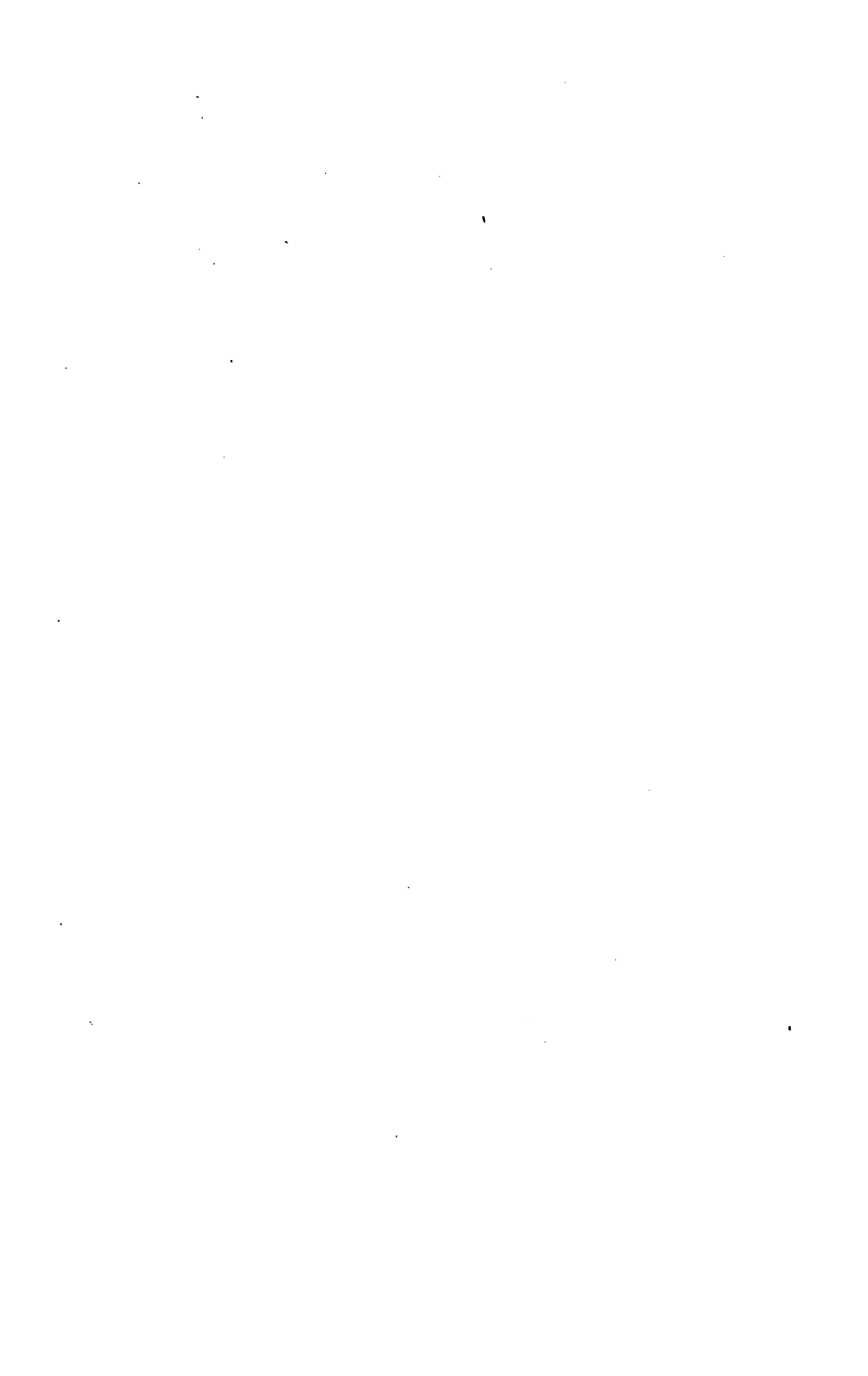
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**THE ASSESSMENT OF
PHYSICAL FITNESS**



THE ASSESSMENT OF PHYSICAL FITNESS

*By Correlation of Vital Capacity and Certain
Measurements of the Body*

BY

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WITH A FOREWORD BY

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Rochester, Minn.



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TO THE MEMORY
OF
JOHN HUTCHINSON, M.D., F.R.C.S.
(1811-61)
SOMETIME PHYSICIAN TO THE BROMPTON
HOSPITAL FOR CONSUMPTION

54847

“And since we are assured that the all wise Creator has observed the most exact proportions of *number, weight, and measure*, in the make of all things; the most likely way, therefore, to get any insight into the nature of those parts of the creation, which come within our observation, must in all reason be to number, weight, and measure. And we have much encouragement to pursue this method of searching into the nature of things, from the great success that has attended any attempts of this kind.”

STEPHEN HALES (1726).

FOREWORD

MAN has done but little through heredity to control or vary human physical development, and while he discusses freely the problems of race betterment he resents any effort at the application of methods for improvement. Man has done much in support of the theory of evolution by carefully considered and applied methods of developing the approved and desired characteristics of his domestic animals whether for beauty, weight, strength, speed or product. This has largely been accomplished through the selection of the sire and the culling out of the poorer females until standards for registry and for advanced registry have been obtained; judges approve as essential those modifications which are largely based on the physical fitness of the individual. Inasmuch as food by its oxidation in muscles or special glands maintains life and function, the perfect body is the body which by its efficient lung surface and heart capacity for circulation gives opportunity for oxidization of an adequate intake of food.

The great increase in the number of mental derelicts and the increase of insanity is a subject of comment. In the medical examination of millions of recruits for the United States Army the wholesale application of mental tests by experts in psychiatry placed the average mental capacity surprisingly low. It is possible that many mental breakdowns should be attributed to stress of the mind which could be avoided by psychiatric tests

which would enable young persons to choose vocational work for which they are mentally adapted. The examination of the draft recruits also showed a poor physical development, more than one-third being physically incapacitated for war duty. Since many of the disabilities are preventable, it shows a great neglect of growing youth during the dependent period of life. The wealth of a nation is largely concerned with the health of its people; thus the problem is one for government recognition and supervision. The physical fitness of youth is recognized in educational institutions only by the selection of those best developed for the sports.

The importance of the physical fitness of man has been only partially appreciated in the estimate of prognosis by physicians in the examination of the sick and in the measurement of the lung capacity by examiners for insurance companies. Dr. Georges Dreyer has shown that the estimation of vital capacity is more than a mere test, that it indicates the tendency to health and resistance to disease, and that in a prognosis of life's duration it parallels very closely the results of a general examination.

CHARLES H. MAYO.

ROCHESTER, MINN.,
November 12, 1920.

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INTRODUCTION

ONE good effect of the War has been that it has thoroughly awakened public interest in the importance of physical fitness, not only to the individual but also to the nation. Hitherto there has been no satisfactory nor uniform method of estimating the physical fitness of a man, woman, or child. It is the aim of this book to supply medical men and others directly interested in the subject with a method, new only in the details of its application, whereby physical fitness can be assessed on the basis of a few simple physical measurements. This method will, I believe, be found to be easily learned, speedy, and trustworthy.

INADEQUACY OF THE OLDER METHODS. Investigators who have been concerned with the study and estimation of the physical development of the population of this and other countries must undoubtedly have felt how unsatisfactory the results obtained by the use of existing Tables dealing with the height and weight of the body have proved.

Extensive statistics have been gathered, but the information derived therefrom has often been contradictory, especially when applied to collections of individuals varying widely in age and bodily development.

Most of the existing Tables dealing with the size of the normal human body are based on the theory that definite relations between age, height, and weight exist. It has, however, been satisfactorily proved that such relationships do not exist when individuals varying widely

in size are examined.* On the other hand it has been possible to show that definite relationships between the weight of the body, the length of the trunk (i.e. the height sitting), and the circumference of the chest do exist, as well as to demonstrate the uniformity of their relationship to the vital capacity of the lungs.

DEVELOPMENT OF THE NEW METHOD. Before it is possible to remedy the evils of under-development, and to promote the cultivation of health and good physique, it is necessary to establish on an adequate basis what are to be regarded as standards of normality with respect to the weight and the size of the body in persons who may be taken as being in a condition of perfect health. Before such standards could be arrived at, however, it was imperative to determine definite relationships between the weight of the body and certain bodily measurements in a number of individuals of widely differing sizes and ages. As it has been shown† that such relationships do exist, not only between the weight and certain measurements of the body but also between these bodily measurements and certain functional measurements—as, for example, Vital Capacity—it was hoped that the general application of these relationships might fill a long-felt want in our present knowledge regarding standards of healthy development, good physique, and physical fitness.

Although these relationships are comparatively simple, the process of calculating each of them necessitates the expenditure of so much time and attention that much of their value for immediate, practical application would be lost if separate calculations for each case had to be made.

* See "Investigations on the Normal Vital Capacity in Man and its Relation to the Size of the Body," by Georges Dreyer. *Lancet*, Aug. 9, 1919, cxcvii, 227-234.

† *Loc. cit.*

It is to avoid this that the appended Tables have been constructed, enabling all persons interested or concerned to gain quickly and easily correct information which otherwise could only be obtained through a series of laborious calculations.

FORMULÆ FROM WHICH THE TABLES ARE CALCULATED.
The various relationships indicated above have been expressed in the following formulæ (*loc. cit.*):—

MALES

$$\begin{aligned} W &= 0.38025 \times \sqrt[0.215]{\lambda}; & W &= 0.662 \times \sqrt[0.265]{\text{Ch.}}; \\ \text{Ch.} &= \frac{\lambda^{1.1442}}{2.00148}; & \text{V.C.} &= \frac{W^{0.72}}{0.69}; & \text{V.C.} &= \frac{\lambda^{2.257}}{6.1172}; \\ \text{V.C.} &= \frac{\text{Ch}^{1.973}}{1.5595}. \end{aligned}$$

FEMALES

$$\begin{aligned} W &= 0.36093 \times \sqrt[0.212]{\lambda}; & W &= 0.30213 \times \sqrt[0.284]{\text{Ch.}}; \\ \text{Ch.} &= \frac{\lambda^{0.9074}}{0.761833}; & \text{V.C.} &= \frac{W^{0.72}}{0.79348}; & \text{V.C.} &= \frac{\lambda^{2.3003}}{8.2714}; \\ \text{V.C.} &= \frac{\text{Ch}^{2.5352}}{16.4951}. \end{aligned}$$

W = weight of the body in grammes; λ = length of the trunk in centimetres; Ch. = circumference of the chest in centimetres; V.C. = Vital Capacity in cubic centimetres. The constants for Vital Capacity represent Class A (p. 17).

It is only when the meaning of "the normal" with respect to these measurements is understood, and when the limits of the normal have been properly defined, that it will be possible to study with any prospect of accuracy or success the deviations from the normal, and to give a definite significance to such terms as "good physique," "poor physique," "physical fitness," and so forth.

THE NORMAL FIGURES. The data forming the basis for the calculation of the present Tables in the case of normal, healthy men and women are derived from the analysis of a number of observations sufficient to ensure a degree of accuracy that should prove entirely satisfactory. While it cannot be claimed that the constants employed for the various indices given in the Tables are to be regarded as fixed and final, it can be stated that any changes they may have to undergo in the future, as a result of the further accumulation of data, in normal adolescents, men, and women, will be small and not likely to impair their present validity from the practical point of view.

I should like to record our thanks to the Medical Research Council for the help they have afforded us in enabling us to test the Tables on a large material already collected under their auspices, as well as to Dr. A. J. Jex-Blake, Physician to St. George's Hospital, Mr. H. F. Pierce, late Major American Medical Air Service, and Dr. F. G. Hobson, D.S.O., for valuable assistance rendered during the preparation of the Tables.

G. D.

THE TABLES: EXPLANATORY

THE annexed Tables give information regarding the weight of the human body in its relationship to the length of the trunk (i.e. the height sitting), the circumference of the chest, and the vital capacity of the lungs.

No data regarding the height standing are given, for the reasons indicated in the Introduction. It will also be seen that no reference is made to the age of the individual, because, for the range of indices given, it has been found that the question of age is of little or no importance up to an age of about 50 years.

To make proper use of the Tables, and to secure comparable results, it is essential that all measurements should be taken uniformly and as nearly as possible in the following manner:—

MEASUREMENTS

WEIGHT. All the weights quoted are net weights of the body without clothes. When it is found desirable to weigh an individual wearing a garment, the weight of the garment must be ascertained and deducted from the observed total weight, so that the record of the actual net weight without clothes is obtained.

LENGTH OF THE TRUNK. The trunk length is taken by means of the special measuring apparatus shown in Fig. 1. It is taken with the subject sitting on the platform, the following points being carefully observed:

The subject places the backs of the fingers upon the platform on which he sits, and, with the fingers pointing

backwards and the knees flexed, lifts the lower portion of the body gently backwards until the lowest bony portion of the os sacrum is in contact with the front of the measuring standard. The back is then straightened until the back of the head comes into contact with the standard (Fig. 1). It will be found that different persons require to bend the knees in different degrees in order to



FIG. 1.—Taking the trunk measurement.

achieve this position. The head should be tilted neither up nor down, and the eyes should look straight forward. The measurement thus obtained gives the distance between the ischial tuberosities and the top of the head.

If no proper measuring stand is available, fairly accurate readings can be obtained in the following manner. The subject should be seated on a level floor or a board, with his back against the perpendicular projecting angle of a wall or cupboard to which the scale is fixed. He should then proceed to seat himself in the manner indicated

above. On account of the influence of the gluteal muscles, the trunk-length should not be taken when the subject is seated in a chair, as this affords measurements that are inconstant and that have been found to be as much as 3 per cent. greater than those taken by the correct procedure.

CIRCUMFERENCE OF THE CHEST. The circumference of the chest should be measured by a tape measure in direct contact with the skin (or, if necessary, placed over a very thin garment). The measurement is taken at the nipple-level in males, that is to say at the level of the fourth intercostal space in the nipple line; in the case of females the measure is taken at the same level, just under the breasts. If the measurement in the case of females is taken at the same level over the breasts, it is found to be on the average $4\frac{1}{2}$ per cent. greater than if taken below the breasts. It is therefore necessary to subtract $4\frac{1}{2}$ per cent. from the chest-measurement taken in this way, or, as an alternative method, multiply the observed measurement by 0.957, before looking up the corresponding weight in the Tables.

EXAMPLE—Metric System

Measurement over the breasts = 76.3 cm.

76.3 cm. \times 0.957 = 73.0 cm. (corrected circumference of chest).

From Table VIII.

73.0 cm. = 53.79 kilos.

EXAMPLE—American Standard System

Measurement over the breasts = 30 in.

30 in. \times 0.957 = 28.71 in. = $28\frac{3}{4}$ in. (corrected circumference of chest).

From Table XX.

$28\frac{3}{4}$ in. = 118.72 lb. = 118 lb. 12 oz.

While being measured the subject should stand up with the arms hanging loosely at the sides, and should be encouraged to talk; in this way quiet natural breathing is secured, and expansion of the chest beyond the resting position is prevented. The measurement required is that of the normally breathing, *not expanded* chest.

THE VITAL CAPACITY. The term "vital capacity" is used to indicate the maximum amount of air an individual is able to expel from the lungs by voluntary effort, after taking the deepest possible inspiration. In measuring the vital capacity it is essential to use an apparatus that affords the least possible resistance to



FIG. 2.—Spirometer.

expiration, and at the same time gives easy and accurate readings of the amount of air expired. The most suitable apparatus has been found to be a spirometer made by Georges Boullite of Paris (Fig. 2).

Naturally, however, any accurate apparatus having the same advantages can be used. A flexible tube of sufficiently large diameter (about 2 cm. or $\frac{3}{4}$ in.) should be attached to the apparatus. In the free end of the tube

is inserted a tight-fitting mouthpiece (indiarubber tubing) 7 or 8 cm. (3 in.) in length and about 2 cm. in diameter. After use these mouthpieces should be placed in a solution of 1 per cent. carbolic acid, rinsed with water, and dried before reinsertion into the tube. A fresh mouthpiece should be used for each subject. The subject should be seated on a high stool, with his back straight, opposite the spirometer (Fig. 3), the dial being so placed that he cannot see the readings. This is done for the purpose of keeping him in ignorance of the readings while being examined, as it is found that any such knowledge tends to interfere with the accuracy of the results. The neck, chest and abdomen must be free from any obstruction to free movement, such as collar, belt or stays. The subject is asked to fill the lungs to the maximum capacity, then the nose is held with one hand, the mouthpiece is placed well inside the lips with the other hand in such a manner as to prevent any escape of air round it. He now blows steadily into the tube, and empties the lungs as completely as possible into the spirometer, being encouraged during the last period of expiration to make the utmost effort to expel all air from the lungs. The readings are given in litres and decimals of litres, to be read directly from the dial. After each expira-



FIG. 3.—Testing the vital capacity.

tion the needle on the single-litre dial should be brought back to zero by the observer. At the end of a long series of examinations the spirometer should be inverted, to allow any condensed moisture to escape. Five successive observations should be taken and recorded, the subject being allowed time for a short rest after each.

To obtain trustworthy results, it is essential that the subject should be carefully shown how to proceed before the actual measurements are taken. *The highest reading out of the five is the one that should be taken as the value of the vital capacity*; it is found to be about 5 per cent. greater than the mean of the observations.

THE TABLES FOR MALES AND FOR FEMALES. There are separate Tables for males and for females. Such a division is essential because the two sexes differ greatly in almost every particular, and the results obtained by using the Tables for one sex in the case of the other are found to be entirely misleading.

THE METRIC SYSTEM. It is strongly recommended that all these measurements should be taken in the metric system, but, as this is far from being generally adopted, alternative Tables are provided in which the measurements are given in pounds, ounces, and inches. In the case of vital capacity, the measurement is always expressed in cubic centimetres. If, however, a spirometer reading in cubic inches is used, the observer can readily change the figures into cubic centimetres by means of the special Reduction Table found on p. 127.

In the case of the Tables recording pounds, ounces, and inches, the accurate value in decimals of pounds and of inches is set down and subsequently reduced to the nearest number of ounces and eighths of an inch. The reason for inserting also the decimal values in the non-metric system is that use of the decimal system enables one to determine most easily the percentage devia-

tion between the indices in the Tables and the actual observations.

PURPOSE OF THE TABLES. The Tables are intended to be used for the following purposes:—

1. The determination of what are the normal proportions between the weight, the trunk-length, and the circumference of the chest.
2. To gain evidence as to underfeeding or malnutrition during different stages of adolescent or adult life, as well as in various classes and occupations of the population.
3. For the study of the different aspects of physical fitness as measured by vital capacity in its relation to weight, trunk-length, and chest-circumference; for the comparison of adolescents with adults, and of the male sex with the female; for the comparison of different trades, occupations, and classes one with another, referring all to a definite common standard.
4. The application of these various measurements to patients with organic disease—e.g. pulmonary tuberculosis, as well as to persons with functional disorders—e.g. industrial fatigue, the fatigue of aviators, and so on.

To gain information on these various points, it is obvious that the Tables must be used in the correct manner. To ensure this, a detailed description of their use, application, and limitations is now given.

TO FIND OUT IF THE WEIGHT IS NORMAL. To ascertain if the weight of an individual or group of individuals is normal, proceed as follows: Having ascertained the trunk-length and the chest-circumference, find first in Table I or Table VII the weight corresponding to the observed trunk-length, then look up the weight for the observed chest-circumference in Table II or Table

VIII; add the two weights together and divide by two, and the normal weight for an individual of the observed trunk-length and chest-circumference will have been obtained. The weight derived from the Tables is now compared with the actual weight observed, and the percentage deviation above or below the normal is readily calculated. The figure derived from the Tables should always be taken as equal to 100 per cent.

If the individual represents an average type, the two weights obtained from the two measurements will be found practically identical; thus:—

EXAMPLE—*Metric System*

FEMALE, AGE 10 YEARS

Observations	{	Weight of the body	= 34.0 kilograms
		Length of the trunk	= 72.7 centimetres
		Circumference of the chest	= 64.0 centimetres

CALCULATION

Weight derived from length of the trunk (72.7 cm.) = 34.15 kilos (from Table VII.).

Weight derived from circumference of the chest (64.0 cm.) = 33.84 kilos (from Table VIII.).

Averaging $\frac{34.15 + 33.84}{2} = 34.0$ kilos, which is the normal weight corresponding to the observed length of the trunk and the circumference of the chest.

Subtracting the calculated from the observed weight, $34.0 - 34.0 = 0$.

Therefore the person weighs exactly what she should weigh according to the Tables.

EXAMPLE—*American Standard System*

FEMALE, AGE 10 YEARS

Observations	{	Weight of the body	= 74 lb. 15 oz.
		Length of the trunk	= $28\frac{5}{8}$ inches.
		Circumference of the chest	= $25\frac{1}{4}$ inches

CALCULATION

Weight derived from length of the trunk ($28\frac{5}{8}$ in.) =
75.32 lb. (from Table XIX.)

Weight derived from circumference of the chest ($25\frac{1}{4}$ in.)
= 75.17 lb. (from Table XX.).

Averaging $\frac{75.32 + 75.17}{2} = 75.25$ lb., which is the normal
weight corresponding to the observed length of the trunk
and the circumference of the chest.

Subtracting the calculated from the observed weight,
 $74.94 - 75.25 = -0.31$ lb.

$-0.31 \times 100 \div 75.25 = -0.41\%$.

Therefore the person weighs 0.41 per cent. less than she should
weigh according to the Tables.

If, on the other hand, the circumference of the chest
and the length of the trunk are markedly out of pro-
portion to each other, the weight obtained from either
the one or the other may be very considerably above or
below the actual weight found, although by taking the
two figures together—as mentioned above—the indi-
vidual will be found to have an absolutely normal weight;
thus:—

EXAMPLE—*Metric System*

MALE, AGE 27 YEARS

Observations	{	Weight of the body	= 100.5 kilograms
		Length of the trunk	= 100.0 centimetres
		Circumference of the chest	= 105.5 centimetres

CALCULATION

Weight derived from length of the trunk (100.0 cm.) =
89.78 kilos (from Table I.).

Weight derived from circumference of the chest (105.5 cm.)
= 112.81 kilos (from Table II.).

Averaging $\frac{89.78 + 112.81}{2} = 101.3$ kilos, which is the nor-

mal weight corresponding to the observed length of the trunk and the circumference of the chest.

Subtracting the calculated from the observed weight,

$$100.5 - 101.3 = -0.8 \text{ kilos.}$$

$$-0.8 \times 100 \div 101.3 = -0.79\%.$$

Therefore the person weighs 0.79 per cent. less than he should weigh according to the Tables.

EXAMPLE—American Standard System

MALE, AGE 27 YEARS

Observations	Weight of the body	= 221 lb. 9 oz.
	Length of the trunk	= $39\frac{3}{8}$ in.
	Circumference of the chest	= $41\frac{1}{2}$ in.

CALCULATION

Weight derived from length of the trunk ($39\frac{3}{8}$ in.) = 198.02 lb. (from Table XIII.).

Weight derived from circumference of the chest ($41\frac{1}{2}$ in.) = 248.13 lb. (from Table XIV.).

Averaging $\frac{198.02 + 248.13}{2} = 223.08$ lb., which is the normal weight corresponding to the observed length of the trunk and the circumference of the chest.

Subtracting the calculated from the observed weight,

$$221.56 - 223.08 = -1.52 \text{ lb.}$$

$$-1.52 \times 100 \div 223.08 = -0.68\%.$$

Therefore the person weighs 0.68 per cent. less than he should weigh according to the Tables.

DIFFICULTIES IN TAKING MEASUREMENTS. It should be noted that the calculated weights derived from chest-measurements show greater individual variations than those obtained from trunk lengths. This is more particularly marked in the adult female owing to the diffi-

culty in obtaining successive measurements that are identical on repeated examination, slight variations of level in the application of the tape measure to the chest giving rise to considerable variations in the measurements, owing to the interference of the mammary tissue. The errors thus introduced are, however, small when averaged up by basing the calculations on both trunk-length and chest-measurement, where individual cases are concerned.

If, on the other hand, one wishes to compare the weights of a whole group or class of individuals with those of another group or class, little advantage, if any, is gained by averaging the figures obtained from both these measurements. At the present stage of our knowledge it would seem that if greater deviations are found to occur by taking both measurements into account than by basing the calculations on trunk-lengths only, the latter series of observations should be considered the more correct.

These remarks on the weights derived from trunk-lengths and chest-measurements apply equally to estimates of the vital capacity based on these two measurements.

What has been said above in the case of females applies also to a certain extent to males, though in males it is easier to obtain accurate chest-measurements.

VARIATIONS IN THE NORMAL WEIGHT. No hard-and-fast line can be drawn between the normal and the abnormal when the weight of the body is being considered. It is best therefore to class body-weights in four categories as either

- (i) Normal, or
- (ii) Possibly abnormal,
- (iii) Probably abnormal,
- (iv) Certainly abnormal.

The Tables having been applied to a large number of observations, it can be stated that if an individual is found to be as much as 5 per cent. below or above normal he (ii) *possibly* has an abnormal weight; while if he differs from the normal by as much as 10 per cent., he is (iii) *probably* abnormal in this respect; and if the deviation reaches as much as 15 per cent., his weight is (iv) *certainly* abnormal. Where groups of persons are concerned, the required percentage deviations are different, but it is possible in each case to say with the same degree of certainty that the weights are either normal, or possibly, probably, or certainly abnormal if the percentage differences are as much as 2, 4, and 6 respectively.

If a person be found to have a weight normal in relation to his trunk-length, while the weight derived from the chest-circumference is either considerably above or considerably below the normal, this fact will show that the chest is either abnormally large or abnormally small in proportion to the length of the trunk and the weight. To ascertain the chest-measurements normally corresponding to a given normal trunk-length, or the trunk-length corresponding to a normal chest-circumference, Table III or Table IX is used.

VITAL CAPACITY AND PHYSICAL FITNESS. In the Tables dealing with vital capacity in its relation to weight, trunk-length and chest-circumference, it will be found that for each given weight or measurement three readings of vital capacity are recorded, in the columns marked A, B, and C respectively, for both males and females. The reason why three sets of figures are given is that different degrees of vital capacity will be found in persons all apparently in good health, and differing only in their physical fitness. It has been found that an individual living a healthy, outdoor life, or compensating

for a sedentary life by regular exercise or sport, will have a considerably larger vital capacity than an individual of the same size and weight living an inactive life.* It is therefore necessary to allow for these differences when comparing individuals with other persons of the class from which they are drawn.

It has now been found that for all practical purposes people may be grouped into three classes—A, B, and C, representing conditions of perfect, medium, and poor physical fitness. It should be clearly understood that the values given in Class A in no way represent the maximum that may be found in a person of a particular size, but are the average figures for the vital capacity a Class A person in perfect health is likely to show. In cases of persons exhibiting a particularly high standard of physical fitness these figures may be considerably exceeded.

In using the Tables to estimate physical fitness, it should first be ascertained, in the manner indicated above, whether the subject's weight is normal or abnormal. Having found the weight to be normal, the next procedure is to see whether his vital capacity places him in Class A, Class B, or Class C. To help in placing people approximately in their appropriate class, the Table on p. 18 is appended. Should the vital capacity of a person who, judged by his mode of life, belongs to a certain class fall considerably below this class (e.g. by more than 10 per cent.), one might have good reason to feel suspicious with regard to the present state of his health. If his vital capacity be normal for his weight and class (he himself being of normal weight), further reference to the vital capacity Tables is unnecessary. If, on the other hand, it is found that, although in a state

* *Loc. cit.*

of apparent good health, he is either too light or too heavy in relation to the length of his trunk and the circumference of his chest, it is necessary, before classifying, to consult the Tables dealing with trunk-length and chest-circumference in relation to vital capacity. For it is obvious that if a person is found to be considerably under weight, but shows a vital capacity normal for the length of his trunk and the circumference of his chest, he would appear to possess a remarkably large vital capacity as judged by his weight. On the other hand, if he were found considerably too heavy (by trunk-length and chest-measurement), he would appear to have a vital capacity considerably too small, if judged by his weight, although he might in fact be normal. To judge by such criteria alone would obviously place the too heavy individuals in a class lower than that to which they belong, and the poorly developed individuals in a better class than their condition merits.

TABLE OF CLASSES*

CLASS A

Army and Navy personnel, and any person who has undergone prolonged training in either Service independent of his ordinary vocation in life.

Police force.

Athletes and active sportsmen.

University students (playing games).

Boys in Public Schools (playing games).

Fire department.

Blacksmiths and boilermakers.

* Though this Table may serve as a guide in classification, it should be borne in mind that an active outdoor life, sports and games, military training and boy scouting, may bring an individual into Class A independently of his vocation.

The same kind of grouping may apply to females, though a relatively larger number of women will be found to belong to Class C.

CLASS B

Professional classes (doctors, lawyers, etc.).

Business men.

Railwaymen.

High-grade mechanics.

Children in upper class schools (may be in Class A depending on school).

Clerks, upper class.

CLASS C

Tailors.

Shopkeepers.

Shoemakers.

Printers.

Potters.

Clerks, lower class.

Painters.

Elementary school children.

Factory children.

VARIATIONS FROM THE NORMAL IN PHYSICAL FITNESS.

As a result of the examination of a large number of apparently healthy people who, from mode of life or occupation, should belong to Classes A, B, or C, respectively, it can safely be stated that if a person is found to have as much as 10 per cent. less vital capacity than is normal for his class, it is *probable* that he is suffering from some health-depressing condition, and if he is as much as 15 per cent. below the normal limit it is *practically certain* that he is abnormal in this respect.

VITAL CAPACITY IN DISEASE. In studying the changes in vital capacity taking place during various diseases, for instance pulmonary tuberculosis, the Tables should be used in exactly the same manner as has been indicated above.

First, find out from the trunk-length and chest-measurement what the patient's normal weight should be,

then look up the vital capacity corresponding to these measurements. In this way information will be gained that will subsequently be of service in determining the significance of future changes in weight, vital capacity, and percentage deviation from the normal. Where an individual has lost considerably in weight it must be borne in mind that the chest-measurement will also have become slightly less. Hence the figures derived from this measurement will often show a smaller deficiency than those obtained from the trunk-length, which naturally shows no such change. Again, however, the advantage from averaging both sets of figures balances the relatively small errors introduced by the change in one of the measurements. The knowledge to which class an individual is likely to belong is also of particular importance when changes in vital capacity are studied in connection with various diseases.

It is perhaps worth recording that changes in the vital capacity appear to offer an unusually trustworthy index of any improvement or deterioration taking place in the pulmonary lesions of patients with tuberculosis of the lungs. It also appears from the study of a tolerably large number of such cases that determinations of the vital capacity and its changes may be of value in prognosis, and help the physician to decide, for example, which patients are likely to benefit by further sanatorium treatment and which are not. (See "The Vital Capacity Constants Applied to Pulmonary Tuberculosis," by Georges Dreyer and L. S. T. Burrell, *Lancet*, June 5, 1920, cxcviii, 1212.)

THE TABLES

METRIC SYSTEM: TABLES I-XII.

AMERICAN STANDARD: TABLES XIII-XXIV.

Table I.—MALES

Showing the normal *weight* in kilograms calculated from the length of the *trunk* given in centimetres.

Length in Centi- metres	Weight in Kilograms	Length in Centi- metres	Weight in Kilograms	Length in Centi- metres	Weight in Kilograms	Length in Centi- metres	Weight in Kilograms
60.0	18.10	66.0	24.41	72.0	32.06	78.0	41.20
.2	.29	.2	.64	.2	.34	.2	.54
.4	.48	.4	.87	.4	.62	.4	.87
.6	.68	.6	25.11	.6	.91	.6	42.21
.8	.87	.8	.35	.8	33.19	.8	.54
61.0	19.06	67.0	.58	73.0	.48	79.0	.88
.2	.26	.2	.83	.2	.77	.2	43.23
.4	.46	.4	26.07	.4	34.06	.4	.57
.6	.66	.6	.31	.6	.35	.6	.99
.8	.86	.8	.56	.8	.64	.8	44.26
62.0	20.06	68.0	.80	74.0	.94	80.0	.61
.2	.27	.2	27.05	.2	35.23	.2	.96
.4	.47	.4	.30	.4	.53	.4	45.31
.6	.68	.6	.55	.6	.83	.6	.67
.8	.89	.8	.80	.8	36.13	.8	46.02
63.0	21.10	69.0	28.06	75.0	.44	81.0	.38
.2	.32	.2	.31	.2	.74	.2	.74
.4	.52	.4	.57	.4	37.05	.4	47.10
.6	.73	.6	.83	.6	.36	.6	.46
.8	.95	.8	29.09	.8	.67	.8	.83
64.0	22.16	70.0	.35	76.0	.98	82.0	48.20
.2	.38	.2	.61	.2	38.29	.2	.57
.4	.60	.4	.88	.4	.61	.4	.94
.6	.82	.6	30.15	.6	.93	.6	49.31
.8	23.04	.8	.41	.8	39.25	.8	.69
65.0	.27	71.0	.69	77.0	.57	83.0	50.07
.2	.49	.2	.96	.2	.89	.2	.44
.4	.72	.4	31.23	.4	40.22	.4	.83
.6	.95	.6	.50	.6	.54	.6	51.21
.8	24.18	.8	.78	.8	.87	.8	.59

Table I.—MALES (*Continued*)

Showing the normal *weight* in kilograms calculated from the length of the *trunk* given in centimetres.

Length in Centi- metres	Weight in Kilograms	Length in Centi- metres	Weight in Kilograms	Length in Centi- metres	Weight in Kilograms	Length in Centi- metres	Weight in Kilograms
84.0	51.98	90.0	64.53	96.0	79.00	102.0	95.53
.2	52.37	.2	.98	.2	.52	.2	96.12
.4	.76	.4	65.43	.4	80.04	.4	.71
.6	53.15	.6	.90	.6	.56	.6	97.31
.8	.55	.8	66.35	.8	81.08	.8	.90
85.0	.94	91.0	.80	97.0	.61	103.0	98.50
.2	54.34	.2	67.26	.2	82.14	.2	99.10
.4	.74	.4	.73	.4	.67	.4	.70
.6	55.14	.6	68.20	.6	83.20	.6	100.31
.8	.55	.8	.66	.8	.74	.8	.92
86.0	.96	92.0	69.13	98.0	84.28	104.0	101.53
.2	56.37	.2	.60	.2	.81	.2	102.15
.4	.78	.4	70.08	.4	85.36	.4	.76
.6	57.19	.6	.56	.6	.90	.6	103.38
.8	.61	.8	71.05	.8	86.45	.8	104.00
87.0	58.02	93.0	.51	99.0	87.00	105.0	.62
.2	.44	.2	72.00	.2	.55	.2	105.25
.4	.86	.4	.49	.4	88.11	.4	.88
.6	59.29	.6	.97	.6	.66	.6	106.51
.8	.71	.8	73.46	.8	89.22	.8	107.14
88.0	60.14	94.0	.96	100.0	.78	106.0	.78
.2	.57	.2	74.45	.2	90.35	.2	108.41
.4	61.00	.4	.94	.4	.91	.4	109.06
.6	.43	.6	75.44	.6	91.49	.6	.70
.8	.87	.8	.95	.8	92.05	.8	110.35
89.0	62.31	95.0	76.45	101.0	.63	107.0	.99
.2	.75	.2	.96	.2	93.21	.2	111.65
.4	63.19	.4	77.46	.4	.78	.4	112.30
.6	.64	.6	.97	.6	94.36	.6	.96
.8	64.08	.8	78.49	.8	.95	.8	113.62

Table I.—MALES (*Continued*)

Showing the normal *weight* in kilograms calculated from the length of the *trunk* given in centimetres.

Length in Centi- metres	Weight in Kilograms	Length in Centi- metres	Weight in Kilograms	Length in Centi- metres	Weight in Kilograms	Length in Centi- metres	Weight in Kilograms
108.0	114.28	110.0	121.05	112.0	128.08	114.0	135.38
.2	.95	.2	.74	.2	.80	.2	136.14
.4	115.61	.4	122.43	.4	129.52	.4	.89
.6	116.28	.6	123.13	.6	130.24	.6	137.63
.8	.96	.8	.83	.8	.97	.8	138.39
109.0	117.63	111.0	124.53	113.0	131.70	115.0	139.15
.2	118.31	.2	125.24	.2	132.44		
.4	.99	.4	.95	.4	133.17		
.6	119.67	.6	126.65	.6	.91		
.8	120.36	.8	127.36	.8	134.64		

Table II.—MALES

Showing the normal *weight* in kilograms calculated from the circumference of the *chest* given in centimetres.

Chest in Centi- metres	Weight in Kilograms	Chest in Centi- metres	Weight in Kilograms	Chest in Centi- metres	Weight in Kilograms	Chest in Centi- metres	Weight in Kilograms
55.0	18.94	61.0	25.15	67.0	32.52	73.0	41.13
.2	19.13	.2	.38	.2	.79	.2	.44
.4	.32	.4	.60	.4	33.06	.4	.76
.6	.51	.6	.83	.6	.33	.6	42.07
.8	.70	.8	26.06	.8	.60	.8	.38
56.0	.90	62.0	.29	68.0	.87	74.0	.70
.2	20.01	.2	.53	.2	34.14	.2	43.01
.4	.29	.4	.76	.4	.42	.4	.33
.6	.49	.6	27.00	.6	.69	.6	.65
.8	.68	.8	.24	.8	.97	.8	.97
57.0	.88	63.0	.47	69.0	35.25	75.0	44.30
.2	21.09	.2	.71	.2	.53	.2	.62
.4	.29	.4	.95	.4	.81	.4	.95
.6	.49	.6	28.20	.6	36.10	.6	45.27
.8	.70	.8	.44	.8	.38	.8	.60
58.0	.90	64.0	.68	70.0	.67	76.0	.93
.2	22.11	.2	.93	.2	.96	.2	46.26
.4	.32	.4	29.18	.4	37.24	.4	.60
.6	.53	.6	.43	.6	.53	.6	.93
.8	.74	.8	.68	.8	.83	.8	47.27
59.0	.95	65.0	.93	71.0	38.12	77.0	.61
.2	23.17	.2	30.18	.2	.41	.2	.95
.4	.38	.4	.44	.4	.71	.4	48.29
.6	.60	.6	.69	.6	39.01	.6	.63
.8	.82	.8	.95	.8	.31	.8	.98
60.0	24.04	66.0	31.21	72.0	.61	78.0	49.32
.2	.26	.2	.47	.2	.91	.2	.67
.4	.48	.4	.73	.4	40.21	.4	50.02
.6	.70	.6	.99	.6	.52	.6	.37
.8	.92	.8	32.26	.8	.83	.8	.72

Table II.—MALES (*Continued*)

Showing the normal *weight* in kilograms calculated from the circumference of the *chest* given in centimetres.

Chest in Centi- metres	Weight in Kilograms	Chest in Centi- metres	Weight in Kilograms	Chest in Centi- metres	Weight in Kilograms	Chest in Centi- metres	Weight in Kilograms
79.0	51.07	85.0	62.42	91.0	75.24	97.0	89.62
.2	.43	.2	.82	.2	.69	.2	90.13
.4	.78	.4	63.22	.4	76.15	.4	.64
.6	52.14	.6	.63	.6	.61	.6	91.15
.8	.50	.8	64.04	.8	77.06	.8	.65
80.0	.86	86.0	.45	92.0	.53	98.0	92.18
.2	53.22	.2	.86	.2	.99	.2	.69
.4	.59	.4	65.27	.4	78.45	.4	93.21
.6	.96	.6	.69	.6	.92	.6	.73
.8	54.32	.8	66.10	.8	79.39	.8	94.25
81.0	.70	87.0	.52	93.0	.86	99.0	.78
.2	55.07	.2	.94	.2	80.33	.2	95.30
.4	.43	.4	67.36	.4	.80	.4	.83
.6	.81	.6	.78	.6	81.28	.6	96.36
.8	56.19	.8	68.21	.8	.75	.8	.89
82.0	.56	88.0	.64	94.0	82.23	100.0	97.42
.2	.94	.2	69.07	.2	.71	.2	.96
.4	57.32	.4	.49	.4	83.19	.4	98.49
.6	.71	.6	.93	.6	.68	.6	99.03
.8	58.09	.8	70.36	.8	84.16	.8	.57
83.0	.47	89.0	.80	95.0	.65	101.0	100.11
.2	.86	.2	71.23	.2	85.14	.2	.66
.4	59.25	.4	.67	.4	.63	.4	101.21
.6	.64	.6	72.11	.6	86.12	.6	.75
.8	60.03	.8	.55	.8	.62	.8	102.30
84.0	.42	90.0	.99	96.0	87.11	102.0	.85
.2	.82	.2	73.44	.2	.62	.2	103.41
.4	61.21	.4	.89	.4	88.11	.4	.96
.6	.61	.6	74.34	.6	.62	.6	104.52
.8	62.01	.8	.79	.8	89.12	.8	105.08

Table II.—MALES (*Continued*)

Showing the normal *weight* in kilograms calculated from the circumference of the *chest* given in centimetres.

Chest in Centi- metres	Weight in Kilograms	Chest in Centi- metres	Weight in Kilograms	Chest in Centi- metres	Weight in Kilograms	Chest in Centi- metres	Weight in Kilograms
103.0	105.64	106.0	114.29	109.0	123.37	112.0	132.90
.2	106.20	.2	.88	.2	.99		
.4	.77	.4	115.47	.4	124.61		
.6	107.34	.6	116.07	.6	125.23		
.8	.91	.8	.66	.8	.86		
104.0	108.47	107.0	117.26	110.0	126.49		
.2	109.05	.2	.86	.2	127.12		
.4	.62	.4	118.47	.4	.76		
.6	110.17	.6	119.07	.6	128.40		
.8	.78	.8	.68	.8	129.03		
105.0	111.36	108.0	120.29	111.0	.66		
.2	.94	.2	.90	.2	130.31		
.4	112.52	.4	121.52	.4	.95		
.6	113.10	.6	122.13	.6	131.59		
.8	.70	.8	.75	.8	132.24		

Table III.—MALES

Showing the normal circumference of the *chest* in centimetres calculated from the length of the *trunk* given in centimetres.

Length in Centi- metres	Chest in Centi- metres	Length in Centi- metres	Chest in Centi- metres	Length in Centi- metres	Chest in Centi- metres	Length in Centi- metres	Chest in Centi- metres
60.0	54.10	66.0	60.34	72.0	66.65	78.0	73.04
.2	.31	.2	.55	.2	.86	.2	.26
.4	.52	.4	.76	.4	67.08	.4	.47
.6	.72	.6	.96	.6	.29	.6	.69
.8	.93	.8	61.17	.8	.50	.8	.90
61.0	55.13	67.0	.38	73.0	.71	79.0	74.12
.2	.34	.2	.59	.2	.92	.2	.33
.4	.55	.4	.80	.4	68.14	.4	.55
.6	.76	.6	62.01	.6	.35	.6	.76
.8	.96	.8	.22	.8	.56	.8	.98
62.0	56.17	68.0	.43	74.0	.77	80.0	75.19
.2	.38	.2	.64	.2	.99	.2	.41
.4	.58	.4	.85	.4	69.20	.4	.62
.6	.79	.6	63.06	.6	.41	.6	.84
.8	57.00	.8	.27	.8	.63	.8	76.05
63.0	.21	69.0	.48	75.0	.84	81.0	.27
.2	.42	.2	.69	.2	70.05	.2	.48
.4	.62	.4	.90	.4	.27	.4	.70
.6	.83	.6	64.12	.6	.48	.6	.92
.8	58.04	.8	.33	.8	.69	.8	77.13
64.0	.25	70.0	.54	76.0	.90	82.0	.35
.2	.46	.2	.75	.2	71.12	.2	.56
.4	.67	.4	.96	.4	.33	.4	.78
.6	.87	.6	65.17	.6	.55	.6	.99
.8	59.08	.8	.38	.8	.76	.8	78.21
65.0	.29	71.0	.59	77.0	.97	83.0	.43
.2	.50	.2	.81	.2	72.19	.2	.64
.4	.71	.4	66.02	.4	.40	.4	.86
.6	.92	.6	.23	.6	.62	.6	79.08
.8	60.13	.8	.41	.8	.83	.8	.29

Table III.—MALES (*Continued*)

Showing the normal circumference of the *chest* in centimetres calculated from the length of the *trunk* given in centimetres.

Length in Centi- metres	Chest in Centi- metres	Length in Centi- metres	Chest in Centi- metres	Length in Centi- metres	Chest in Centi- metres	Length in Centi- metres	Chest in Centi- metres
84.0	79.51	90.0	86.04	96.0	92.63	102.0	99.29
.2	.72	.2	.26	.2	.85	.2	.51
.4	.94	.4	.48	.4	93.07	.4	.73
.6	80.16	.6	.70	.6	.30	.6	.96
.8	.38	.8	.92	.8	.52	.8	100.18
85.0	.59	91.0	87.13	97.0	.74	103.0	.40
.2	.81	.2	.35	.2	.96	.2	.62
.4	81.03	.4	.57	.4	94.18	.4	.85
.6	.24	.6	.79	.6	.40	.6	101.07
.8	.46	.8	88.01	.8	.62	.8	.30
86.0	.68	92.0	.23	98.0	.85	104.0	.52
.2	.90	.2	.45	.2	95.07	.2	.74
.4	82.11	.4	.67	.4	.29	.4	.96
.6	.33	.6	.89	.6	.51	.6	102.19
.8	.55	.8	89.11	.8	.73	.8	.41
87.0	.77	93.0	.33	99.0	.95	105.0	.64
.2	.98	.2	.55	.2	96.18	.2	.86
.4	83.20	.4	.77	.4	.40	.4	103.08
.6	.42	.6	.99	.6	.62	.6	.30
.8	.64	.8	90.21	.8	.84	.8	.53
88.0	.85	94.0	.43	100.0	97.06	106.0	.75
.2	84.07	.2	.65	.2	.29	.2	.98
.4	.29	.4	.87	.4	.51	.4	104.20
.6	.51	.6	91.09	.6	.73	.6	.43
.8	.73	.8	.31	.8	.95	.8	.65
89.0	.95	95.0	.53	101.0	98.17	107.0	.87
.2	85.16	.2	.75	.2	.40	.2	105.10
.4	.38	.4	.97	.4	.62	.4	.32
.6	.60	.6	92.19	.6	.84	.6	.55
.8	.82	.8	.41	.8	99.07	.8	.77

Table III.—**MALES** (*Continued*)

Showing the normal circumference of the *chest* in centimetres calculated from the length of the *trunk* given in centimetres.

Length in Centi- metres	Chest in Centi- metres	Length in Centi- metres	Chest in Centi- metres	Length in Centi- metres	Chest in Centi- metres	Length in Centi- metres	Chest in Centi- metres
108.0	105.99	110.0	108.25	112.0	110.50	114.0	112.76
.2	106.22	.2	.47	.2	.73	.2	.99
.4	.45	.4	.70	.4	.95	.4	113.22
.6	.67	.6	.92	.6	111.18	.6	.44
.8	.90	.8	109.15	.8	.40	.8	.67
109.0	107.12	111.0	.38	113.0	.63	115.0	.89
.2	.34	.2	.60	.2	.86		
.4	.57	.4	.82	.4	112.05		
.6	.80	.6	110.05	.6	.31		
.8	108.02	.8	.28	.8	.54		

Table IV.—MALES

Showing the normal *vital capacity* in cubic centimeters calculated from the *weight* of the body given in kilograms.

Weight in Kilograms	Vital Capacity in Cubic Centimetres			Weight in Kilograms	Vital Capacity in Cubic Centimetres		
	Class A	Class B	Class C		Class A	Class B	Class C
20.0	1811	1653	1547	35.0	2710	2474	2314
.5	1843	1683	1574	.5	2737	2499	2338
21.0	1876	1712	1602	36.0	2765	2524	2361
.5	1908	1742	1629	.5	2793	2550	2385
22.0	1940	1771	1656	37.0	2820	2575	2408
.5	1971	1800	1683	.5	2847	2600	2432
23.0	2003	1828	1710	38.0	2875	2625	2455
.5	2034	1857	1737	.5	2902	2649	2478
24.0	2065	1885	1763	39.0	2929	2674	2501
.5	2096	1914	1790	.5	2956	2699	2524
25.0	2127	1942	1816	40.0	2983	2723	2542
.5	2157	1969	1842	.5	3010	2748	2570
26.0	2187	1997	1868	41.0	3036	2772	2593
.5	2218	2025	1894	.5	3063	2797	2616
27.0	2248	2052	1920	42.0	3090	2821	2638
.5	2278	2079	1945	.5	3116	2845	2661
28.0	2307	2107	1970	43.0	3142	2869	2684
.5	2337	2134	1996	.5	3169	2893	2706
29.0	2366	2161	2021	44.0	3195	2917	2728
.5	2396	2187	2046	.5	3221	2941	2751
30.0	2425	2214	2071	45.0	3247	2964	2773
.5	2454	2240	2096	.5	3273	2988	2795
31.0	2483	2267	2120	46.0	3299	3012	2817
.5	2512	2293	2145	.5	3324	3035	2839
32.0	2540	2319	2169	47.0	3350	3059	2861
.5	2569	2345	2194	.5	3376	3082	2883
33.0	2597	2371	2218	48.0	3401	3105	2905
.5	2625	2397	2242	.5	3427	3129	2927
34.0	2654	2423	2266	49.0	3452	3152	2948
.5	2682	2448	2290	.5	3478	3175	2970

Table IV.—MALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the *weight* of the body given in kilograms.

Weight in Kilograms	Vital Capacity in Cubic Centimetres			Weight in Kilograms	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
50.0	3503	3198	2991	65.0	4231	3863	3613
.5	3528	3221	3013	.5	4255	3884	3633
51.0	3553	3244	3034	66.0	4278	3906	3653
.5	3578	3267	3056	.5	4301	3927	3673
52.0	3603	3290	3077	67.0	4324	3948	3693
.5	3628	3313	3098	.5	4348	3970	3713
53.0	3653	3335	3120	68.0	4371	3991	3733
.5	3678	3358	3141	.5	4394	4012	3752
54.0	3702	3380	3162	69.0	4417	4033	3772
.5	3727	3403	3183	.5	4440	4054	3792
55.0	3752	3425	3204	70.0	4463	4075	3811
.5	3776	3448	3225	.5	4486	4096	3831
56.0	3801	3470	3246	71.0	4509	4117	3851
.5	3825	3492	3267	.5	4532	4137	3870
57.0	3849	3514	3287	72.0	4554	4158	3890
.5	3874	3537	3308	.5	4577	4179	3909
58.0	3898	3559	3329	73.0	4600	4200	3928
.5	3922	3581	3350	.5	4623	4220	3948
59.0	3946	3603	3370	74.0	4645	4241	3967
.5	3970	3625	3391	.5	4668	4262	3986
60.0	3994	3647	3411	75.0	4690	4282	4005
.5	4018	3669	3432	.5	4713	4303	4025
61.0	4042	3690	3452	76.0	4735	4323	4044
.5	4066	3712	3472	.5	4758	4344	4063
62.0	4090	3734	3492	77.0	4780	4364	4082
.5	4113	3755	3513	.5	4802	4385	4101
63.0	4137	3777	3533	78.0	4825	4405	4120
.5	4161	3799	3553	.5	4847	4425	4139
64.0	4184	3820	3573	79.0	4869	4445	4158
.5	4208	3842	3593	.5	4891	4466	4177

Table IV.—MALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the *weight* of the body given in kilograms.

Weight in Kilograms	Vital Capacity in Cubic Centimetres			Weight in Kilograms	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
80.0	4913	4486	4196	95.0	5561	5077	4749
.5	4936	4506	4215	.5	5582	5096	4767
81.0	4958	4526	4234	96.0	5603	5115	4785
.5	4980	4546	4253	.5	5624	5134	4803
82.0	5001	4566	4271	97.0	5644	5153	4820
.5	5023	4586	4290	.5	5665	5173	4838
83.0	5045	4606	4309	98.0	5686	5192	4856
.5	5067	4626	4327	.5	5707	5211	4874
84.0	5089	4646	4346	99.0	5728	5230	4892
.5	5111	4666	4365	.5	5749	5249	4910
85.0	5133	4686	4383	100.0	5770	5268	4927
.5	5154	4706	4402	.5	5790	5287	4945
86.0	5176	4726	4420	101.0	5811	5306	4963
.5	5198	4745	4439	.5	5832	5325	4980
87.0	5219	4765	4457	102.0	5853	5343	4998
.5	5241	4785	4476	.5	5873	5362	5016
88.0	5262	4805	4494	103.0	5894	5381	5033
.5	5284	4824	4513	.5	5914	5400	5051
89.0	5305	4844	4531	104.0	5935	5419	5068
.5	5327	4863	4549	.5	5956	5437	5086
90.0	5348	4883	4567	105.0	5976	5456	5104
.5	5370	4902	4586	.5	5996	5475	5121
91.0	5391	4922	4604	106.0	6017	5493	5138
.5	5412	4941	4622	.5	6037	5512	5156
92.0	5434	4961	4640	107.0	6058	5531	5173
.5	5455	4980	4658	.5	6078	5549	5191
93.0	5476	5000	4677	108.0	6098	5568	5208
.5	5497	5019	4695	.5	6119	5586	5225
94.0	5518	5038	4713	109.0	6139	5605	5243
.5	5539	5058	4731	.5	6159	5623	5260

Table IV.—MALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the *weight* of the body given in kilograms.

Weight in Kilograms	Vital Capacity in Cubic Centimetres			Weight in Kilograms	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
110.0	6180	5642	5277	120.0	6579	6007	5619
.5	6200	5660	5295	.5	6599	6025	5635
111.0	6220	5679	5312	121.0	6619	6043	5652
.5	6240	5697	5329	.5	6638	6061	5669
112.0	6260	5716	5346	122.0	6658	6079	5686
.5	6280	5734	5363	.5	6677	6097	5703
113.0	6300	5752	5381	123.0	6697	6115	5719
.5	6321	5771	5398	.5	6717	6132	5736
114.0	6340	5789	5415	124.0	6736	6150	5753
.5	6361	5807	5432	.5	6756	6168	5769
115.0	6380	5825	5449	125.0	6775	6186	5786
.5	6400	5844	5466	.5	6795	6204	5803
116.0	6420	5862	5483	126.0	6814	6222	5819
.5	6440	5880	5500	.5	6834	6239	5836
117.0	6460	5898	5517	127.0	6853	6257	5853
.5	6480	5916	5534	.5	6873	6275	5869
118.0	6500	5934	5551	128.0	6892	6292	5886
.5	6520	5953	5568	.5	6911	6310	5902
119.0	6540	5971	5585	129.0	6931	6328	5919
.5	6559	5989	5602	.5	6950	6345	5935

Table V.—MALES

Showing the normal *vital capacity* in cubic centimetres calculated from the length of the *trunk* given in centimetres.

Length in Centi- metres	Vital Capacity in Cubic Centimetres			Length in Centi- metres	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
60.0	1686	1539	1439	66.0	2090	1908	1785
.2	1698	1551	1450	.2	2104	1921	1797
.4	1711	1562	1461	.4	2119	1935	1810
.6	1724	1574	1472	.6	2133	1948	1822
.8	1737	1586	1483	.8	2148	1961	1834
61.0	1750	1597	1494	67.0	2162	1974	1847
.2	1763	1609	1505	.2	2177	1987	1859
.4	1776	1621	1516	.4	2192	2001	1872
.6	1789	1633	1528	.6	2206	2014	1884
.8	1802	1645	1539	.8	2221	2028	1897
62.0	1815	1657	1550	68.0	2236	2041	1909
.2	1828	1669	1561	.2	2251	2055	1922
.4	1842	1681	1573	.4	2266	2069	1935
.6	1854	1693	1584	.6	2281	2082	1948
.8	1868	1706	1596	.8	2296	2096	1960
63.0	1882	1718	1607	69.0	2311	2110	1973
.2	1895	1730	1619	.2	2326	2124	1986
.4	1909	1743	1630	.4	2341	2137	1999
.6	1923	1755	1642	.6	2356	2151	2012
.8	1936	1768	1653	.8	2372	2165	2025
64.0	1950	1780	1665	70.0	2387	2179	2038
.2	1964	1793	1677	.2	2402	2193	2052
.4	1978	1806	1689	.4	2418	2208	2065
.6	1991	1818	1701	.6	2433	2222	2078
.8	2005	1831	1713	.8	2449	2236	2091
65.0	2019	1844	1725	71.0	2465	2250	2105
.2	2033	1856	1736	.2	2480	2264	2118
.4	2047	1869	1749	.4	2496	2279	2132
.6	2062	1882	1761	.6	2512	2293	2145
.8	2076	1895	1773	.8	2528	2308	2159

Table V.—MALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the length of the *trunk* given in centimetres.

Length in Centi- metres	Vital Capacity in Cubic Centimetres			Length in Centi- metres	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
72.0	2544	2322	2172	78.0	3047	2782	2602
.2	2559	2336	2185	.2	3065	2798	2617
.4	2576	2352	2200	.4	3083	2815	2633
.6	2592	2366	2213	.6	3100	2831	2648
.8	2608	2381	2227	.8	3118	2847	2663
73.0	2624	2396	2241	79.0	3136	2863	2678
.2	2640	2411	2255	.2	3154	2880	2694
.4	2647	2426	2269	.4	3172	2896	2709
.6	2673	2440	2283	.6	3190	2913	2724
.8	2689	2455	2297	.8	3208	2929	2740
74.0	2706	2470	2311	80.0	3226	2946	2755
.2	2722	2486	2325	.2	3245	2962	2771
.4	2739	2501	2339	.4	3263	2979	2787
.6	2756	2516	2353	.6	3281	2996	2802
.8	2772	2531	2368	.8	3300	3013	2818
75.0	2789	2546	2382	81.0	3318	3030	2834
.2	2806	2562	2396	.2	3337	3047	2850
.4	2823	2577	2411	.4	3355	3063	2865
.6	2840	2593	2425	.6	3374	3080	2881
.8	2857	2608	2440	.8	3393	3097	2897
76.0	2874	2624	2454	82.0	3411	3115	2913
.2	2891	2639	2469	.2	3430	3132	2929
.4	2908	2655	2483	.4	3449	3149	2946
.6	2925	2671	2498	.6	3468	3166	2962
.8	2943	2687	2513	.8	3487	3184	2978
77.0	2960	2702	2528	83.0	3506	3201	2994
.2	2977	2718	2543	.2	3525	3218	3010
.4	2995	2734	2557	.4	3544	3236	3027
.6	3012	2750	2572	.6	3564	3254	3043
.8	3030	2766	2587	.8	3583	3271	3060

Table V.—**MALES** (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the length of the *trunk* given in centimetres.

Length in Centi- metres	Vital Capacity in Cubic Centimetres			Length in Centi- metres	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
84.0	3602	3289	3076	90.0	4209	3843	3594
.2	3621	3306	3093	.2	4230	3862	3613
.4	3641	3324	3109	.4	4251	3882	3631
.6	3660	3342	3126	.6	4273	3901	3649
.8	3680	3360	3143	.8	4294	3920	3667
85.0	3700	3378	3160	91.0	4315	3940	3685
.2	3719	3396	3176	.2	4337	3959	3704
.4	3739	3414	3193	.4	4358	3979	3722
.6	3759	3432	3210	.6	4380	3999	3740
.8	3779	3450	3227	.8	4401	4018	3759
86.0	3799	3468	3244	92.0	4423	4038	3777
.2	3819	3486	3261	.2	4445	4058	3796
.4	3838	3505	3278	.4	4467	4078	3814
.6	3859	3523	3295	.6	4488	4098	3833
.8	3879	3541	3312	.8	4510	4118	3852
87.0	3899	3560	3330	93.0	4532	4138	3871
.2	3919	3578	3347	.2	4554	4158	3890
.4	3940	3597	3364	.4	4577	4178	3908
.6	3960	3615	3382	.6	4599	4199	3927
.8	3980	3634	3399	.8	4621	4219	3946
88.0	4001	3653	3417	94.0	4643	4239	3965
.2	4021	3672	3434	.2	4665	4259	3984
.4	4042	3690	3452	.4	4688	4280	4003
.6	4063	3709	3470	.6	4710	4300	4022
.8	4083	3728	3487	.8	4733	4321	4042
89.0	4104	3747	3505	95.0	4755	4341	4061
.2	4125	3766	3523	.2	4778	4362	4080
.4	4146	3785	3541	.4	4801	4383	4100
.6	4167	3804	3559	.6	4823	4404	4119
.8	4188	3824	3577	.8	4846	4425	4139

Table V.—MALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the length of the *trunk* given in centimetres.

Length in Centi- metres	Vital Capacity in Cubic Centimetres			Length in Centi- metres	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
96.0	4869	4445	4158	102.0	5583	5097	4768
.2	4892	4466	4178	.2	5608	5120	4789
.4	4915	4487	4197	.4	5633	5143	4810
.6	4938	4508	4217	.6	5657	5165	4831
.8	4961	4530	4237	.8	5682	5188	4853
97.0	4984	4551	4256	103.0	5707	5211	4874
.2	5008	4572	4276	.2	5732	5234	4895
.4	5031	4593	4296	.4	5759	5258	4918
.6	5054	4614	4316	.6	5783	5280	4938
.8	5078	4636	4336	.8	5808	5303	4960
98.0	5101	4657	4356	104.0	5833	5326	4981
.2	5124	4679	4376	.2	5858	5349	5003
.4	5148	4700	4397	.4	5884	5372	5025
.6	5172	4722	4417	.6	5909	5395	5047
.8	5195	4743	4437	.8	5935	5418	5068
99.0	5219	4765	4457	105.0	5961	5442	5090
.2	5242	4786	4477	.2	5986	5465	5112
.4	5267	4809	4498	.4	6012	5489	5134
.6	5291	4831	4518	.6	6037	5512	5156
.8	5315	4852	4539	.8	6063	5536	5178
100.0	5339	4874	4559	106.0	6089	5560	5200
.2	5363	4896	4580	.2	6115	5583	5222
.4	5387	4918	4601	.4	6141	5607	5245
.6	5412	4941	4621	.6	6167	5631	5267
.8	5436	4963	4642	.8	6193	5655	5289
101.0	5460	4985	4663	107.0	6220	5679	5312
.2	5486	5008	4685	.2	6246	5702	5334
.4	5509	5030	4705	.4	6272	5727	5357
.6	5534	5052	4726	.6	6299	5751	5379
.8	5558	5075	4747	.8	6325	5775	5402

Table V.—MALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the length of the *trunk* given in centimetres.

Length in Centi- metres	Vital Capacity in Cubic Centimetres			Length in Centi- metres	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
108.0	6352	5799	5424	112.0	6895	6295	5888
.2	6378	5824	5447	.2	6923	6321	5912
.4	6405	5848	5470	.4	6951	6346	5936
.6	6432	5872	5493	.6	6979	6372	5960
.8	6458	5896	5515	.8	7007	6397	5984
109.0	6485	5921	5538	113.0	7035	6423	6008
.2	6512	5945	5561	.2	7063	6449	6032
.4	6539	5970	5584	.4	7091	6474	6056
.6	6566	5995	5607	.6	7119	6500	6080
.8	6593	6019	5630	.8	7148	6526	6104
110.0	6620	6044	5654	114.0	7176	6552	6128
.2	6647	6069	5677	.2	7205	6578	6153
.4	6675	6094	5700	.4	7233	6604	6177
.6	6702	6119	5724	.6	7261	6630	6201
.8	6730	6144	5747	.8	7290	6656	6226
111.0	6757	6169	5770	115.0	7319	6682	6250
.2	6784	6194	5794				
.4	6812	6219	5818				
.6	6839	6244	5841				
.8	6867	6270	5865				

Table VI.—MALES

Showing the normal *vital capacity* in cubic centimetres calculated from the circumference of the *chest* given in centimetres.

Chest in Centimetres	Vital Capacity in Cubic Centimetres			Chest in Centimetres	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
55.0	1741	1589	1487	61.0	2135	1950	1824
.2	1753	1601	1497	.2	2149	1962	1835
.4	1766	1612	1508	.4	2163	1975	1847
.6	1778	1624	1519	.6	2177	1988	1859
.8	1791	1635	1530	.8	2191	2000	1871
56.0	1804	1647	1540	62.0	2205	2013	1883
.2	1817	1659	1551	.2	2219	2026	1895
.4	1829	1670	1562	.4	2233	2039	1907
.6	1842	1682	1573	.6	2247	2052	1919
.8	1855	1694	1584	.8	2262	2065	1931
57.0	1868	1705	1595	63.0	2276	2078	1943
.2	1881	1717	1606	.2	2290	2091	1956
.4	1894	1729	1617	.4	2304	2104	1968
.6	1907	1741	1629	.6	2319	2117	1980
.8	1920	1753	1640	.8	2333	2130	1992
58.0	1933	1765	1651	64.0	2348	2143	2005
.2	1946	1777	1662	.2	2362	2157	2017
.4	1960	1789	1673	.4	2377	2170	2030
.6	1973	1801	1685	.6	2391	2183	2042
.8	1986	1813	1696	.8	2406	2197	2055
59.0	1999	1826	1708	65.0	2420	2210	2067
.2	2013	1838	1719	.2	2435	2223	2080
.4	2026	1850	1731	.4	2450	2237	2092
.6	2040	1862	1742	.6	2465	2250	2105
.8	2053	1875	1753	.8	2480	2264	2118
60.0	2067	1887	1765	66.0	2494	2277	2130
.2	2081	1900	1777	.2	2509	2291	2143
.4	2094	1912	1788	.4	2524	2305	2156
.6	2108	1924	1800	.6	2539	2318	2169
.8	2122	1937	1812	.8	2555	2332	2182

Table VI.—MALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the circumference of the *chest* given in centimetres.

Chest in Centimetres	Vital Capacity in Cubic Centimetres			Chest in Centimetres	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
67.0	2570	2346	2194	73.0	3043	2779	2599
.2	2585	2360	2207	.2	3060	2794	2613
.4	2600	2374	2220	.4	3076	2809	2627
.6	2615	2388	2233	.6	3093	2824	2641
.8	2631	2402	2246	.8	3110	2839	2656
68.0	2646	2416	2260	74.0	3126	2854	2670
.2	2661	2430	2273	.2	3143	2869	2684
.4	2677	2444	2286	.4	3160	2885	2698
.6	2692	2458	2299	.6	3176	2900	2713
.8	2708	2472	2312	.8	3193	2915	2727
69.0	2723	2486	2326	75.0	3210	2931	2741
.2	2739	2500	2339	.2	3227	2946	2756
.4	2754	2515	2352	.4	3244	2962	2770
.6	2770	2529	2366	.6	3261	2977	2785
.8	2786	2543	2379	.8	3278	2993	2799
70.0	2802	2558	2393	76.0	3295	3008	2814
.2	2817	2572	2406	.2	3312	3024	2829
.4	2833	2587	2420	.4	3329	3040	2843
.6	2849	2601	2433	.6	3347	3055	2858
.8	2865	2616	2447	.8	3364	3071	2873
71.0	2881	2630	2461	77.0	3381	3087	2888
.2	2898	2646	2475	.2	3399	3103	2902
.4	2913	2660	2488	.4	3416	3119	2917
.6	2929	2674	2502	.6	3433	3135	2932
.8	2945	2689	2515	.8	3451	3151	2947
72.0	2962	2704	2529	78.0	3468	3167	2962
.2	2978	2719	2543	.2	3486	3183	2977
.4	2994	2734	2557	.4	3504	3199	2992
.6	3011	2749	2571	.6	3521	3215	3007
.8	3027	2764	2585	.8	3539	3231	3022

Table VI.—MALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the circumference of the *chest* given in centimetres.

Chest in Centimetres	Vital Capacity in Cubic Centimetres			Chest in Centimetres	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
79.0	3557	3247	3037	85.0	4109	3752	3509
.2	3575	3264	3053	.2	4128	3769	3526
.4	3592	3280	3068	.4	4148	3787	3542
.6	3610	3296	3083	.6	4167	3804	3558
.8	3628	3312	3098	.8	4186	3822	3575
80.0	3646	3329	3114	86.0	4205	3839	3591
.2	3664	3345	3129	.2	4225	3857	3608
.4	3682	3362	3145	.4	4244	3876	3624
.6	3700	3378	3160	.6	4263	3892	3641
.8	3718	3395	3175	.8	4283	3910	3657
81.0	3737	3211	3191	87.0	4302	3928	3674
.2	3755	3428	3207	.2	4322	3946	3691
.4	3773	3445	3222	.4	4341	3964	3707
.6	3791	3461	3238	.6	4361	3981	3724
.8	3810	3478	3253	.8	4381	3999	3741
82.0	3828	3495	3269	88.0	4400	4017	3758
.2	3846	3512	3285	.2	4420	4036	3775
.4	3865	3529	3301	.4	4440	4054	3792
.6	3884	3546	3317	.6	4460	4072	3808
.8	3902	3563	3332	.8	4480	4090	3826
83.0	3921	3580	3348	89.0	4500	4108	3843
.2	3939	3597	3364	.2	4519	4126	3860
.4	3958	3614	3380	.4	4540	4145	3877
.6	3977	3631	3396	.6	4560	4163	3894
.8	3996	3648	3412	.8	4580	4181	3911
84.0	4014	3665	3428	90.0	4600	4200	3928
.2	4033	3682	3444	.2	4620	4218	3946
.4	4052	3700	3461	.4	4640	4237	3963
.6	4071	3717	3477	.6	4661	4255	3980
.8	4090	3734	3493	.8	4681	4274	3998

Table VI.—MALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the circumference of the *chest* given in centimetres.

Chest in Centi- metres	Vital Capacity in Cubic Centimetres			Chest in Centi- metres	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
91.0	4701	4292	4015	97.0	5332	4868	4554
.2	4722	4311	4032	.2	5354	4888	4572
.4	4742	4330	4050	.4	5376	4908	4591
.6	4763	4348	4067	.6	5398	4928	4610
.8	4783	4367	4085	.8	5420	4948	4628
92.0	4804	4386	4102	98.0	5441	4968	4647
.2	4824	4405	4120	.2	5463	4988	4666
.4	4845	4423	4138	.4	5485	5008	4684
.6	4866	4442	4155	.6	5507	5028	4703
.8	4886	4461	4173	.8	5529	5048	4722
93.0	4907	4480	4191	99.0	5552	5069	4741
.2	4928	4499	4209	.2	5574	5089	4760
.4	4949	4518	4226	.4	5596	5109	4779
.6	4970	4538	4244	.6	5618	5129	4798
.8	4991	4557	4262	.8	5640	5150	4817
94.0	5012	4576	4280	100.0	5663	5170	4836
.2	5033	4595	4298	.2	5685	5190	4855
.4	5054	4614	4316	.4	5707	5211	4874
.6	5075	4634	4334	.6	5730	5231	4893
.8	5096	4653	4352	.8	5752	5252	4913
95.0	5118	4672	4370	101.0	5775	5272	4932
.2	5139	4692	4389	.2	5798	5293	4951
.4	5160	4711	4407	.4	5820	5314	4970
.6	5182	4731	4425	.6	5843	5334	4990
.8	5203	4750	4443	.8	5866	5355	5009
96.0	5224	4770	4462	102.0	5888	5376	5029
.2	5246	4790	4480	.2	5911	5397	5048
.4	5267	4809	4498	.4	5934	5418	5068
.6	5289	4829	4517	.6	5957	5439	5087
.8	5311	4849	4535	.8	5980	5459	5107

Table VI.—MALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the circumference of the *chest* given in centimetres.

Chest in Centi- metres	Vital Capacity in Cubic Centimetres			Chest in Centi- metres	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
103.0	6003	5481	5126	108.0	6591	6018	5629
.2	6026	5502	5146	.2	6615	6040	5650
.4	6049	5523	5166	.4	6639	6062	5670
.6	6072	5544	5185	.6	6664	6084	5691
.8	6095	5565	5205	.8	6688	6106	5712
104.0	6118	5586	5225	109.0	6712	6128	5732
.2	6141	5607	5245	.2	6736	6150	5753
.4	6165	5628	5265	.4	6761	6173	5774
.6	6188	5650	5285	.6	6785	6195	5794
.8	6211	5671	5305	.8	6810	6217	5815
105.0	6235	5692	5325	110.0	6834	6240	5836
.2	6258	5714	5345	.2	6859	6262	5857
.4	6282	5735	5365	.4	6883	6285	5878
.6	6305	5757	5385	.6	6908	6307	5899
.8	6329	5778	5405	.8	6933	6329	5920
106.0	6353	5800	5425	111.0	6957	6352	5941
.2	6376	5821	5445	.2	6982	6374	5963
.4	6400	5843	5466	.4	7007	6397	5984
.6	6424	5865	5486	.6	7032	6420	6005
.8	6447	5886	5506	.8	7057	6443	6026
107.0	6471	5908	5526	112.0	7082	6466	6048
.2	6495	5930	5547				
.4	6519	5952	5567				
.6	6543	5974	5588				
.8	6567	5996	5608				

Table VII.—FEMALES

Showing the normal *weight* in kilograms calculated from the length of the *trunk* given in centimetres.

Length in Centi- metres	Weight in Kilograms	Length in Centi- metres	Weight in Kilograms	Length in Centi- metres	Weight in Kilograms	Length in Centi- metres	Weight in Kilograms
55.0	14.00	61.0	19.50	67.0	26.31	73.0	34.60
.2	.17	.2	.70	.2	.56	.2	.91
.4	.83	.4	.91	.4	.82	.4	35.21
.6	.51	.6	20.12	.6	27.07	.6	.52
.8	.67	.8	.32	.8	.83	.8	.83
56.0	.84	62.0	.54	68.0	.59	74.0	36.14
.2	15.01	.2	.75	.2	.84	.2	.45
.4	.18	.4	.96	.4	28.11	.4	.77
.6	.35	.6	21.18	.6	.37	.6	37.09
.8	.52	.8	.39	.8	.64	.8	.40
57.0	.70	63.0	.61	69.0	.90	75.0	.72
.2	.87	.2	.83	.2	29.17	.2	38.05
.4	16.05	.4	22.05	.4	.44	.4	.37
.6	.23	.6	.28	.6	.71	.6	.70
.8	.41	.8	.50	.8	.99	.8	39.03
58.0	.60	64.0	.73	70.0	30.26	76.0	.35
.2	.78	.2	.96	.2	.54	.2	.69
.4	.96	.4	23.19	.4	.82	.4	40.02
.6	17.15	.6	.42	.6	31.10	.6	.36
.8	.34	.8	.65	.8	.38	.8	.69
59.0	.54	65.0	.08	71.0	.67	77.0	41.03
.2	.72	.2	24.12	.2	.95	.2	.38
.4	.91	.4	.36	.4	32.24	.4	.72
.6	18.10	.6	.59	.6	.53	.6	42.06
.8	.30	.8	.83	.8	.82	.8	.41
60.0	.49	66.0	25.07	72.0	33.11	78.0	.76
.2	.69	.2	.32	.2	.41	.2	43.11
.4	.89	.4	.57	.4	.70	.4	.47
.6	19.09	.6	.81	.6	34.00	.6	.82
.8	.29	.8	26.06	.8	.30	.8	44.18

Table VII.—FEMALES (*Continued*)

Showing the normal *weight* in kilograms calculated from the length of the *trunk* given in centimetres.

Length in Centi- metres	Weight in Kilograms	Length in Centi- metres	Weight in Kilograms	Length in Centi- metres	Weight in Kilograms	Length in Centi- metres	Weight in Kilograms
79.0	44.54	85.0	56.27	91.0	69.97	97.0	85.81
.2	.90	.2	.70	.2	70.46	.2	86.38
.4	45.26	.4	57.12	.4	.96	.4	.94
.6	.63	.6	.55	.6	71.46	.6	87.51
.8	.99	.8	.98	.8	.96	.8	88.09
80.0	46.36	86.0	58.41	92.0	72.46	98.0	.67
.2	.73	.2	.85	.2	.96	.2	89.24
.4	47.11	.4	59.28	.4	73.47	.4	.83
.6	.48	.6	.72	.6	.98	.6	90.41
.8	.86	.8	60.17	.8	74.49	.8	91.00
81.0	48.24	87.0	.61	93.0	75.00	99.0	.59
.2	.62	.2	61.06	.2	.52	.2	92.18
.4	49.00	.4	.51	.4	76.04	.4	.78
.6	.39	.6	.96	.6	.57	.6	93.37
.8	.78	.8	62.41	.8	77.08	.8	.97
82.0	50.17	88.0	.86	94.0	.61	100.0	94.58
.2	.56	.2	63.32	.2	78.14	.2	95.18
.4	.96	.4	.78	.4	.67	.4	.79
.6	51.35	.6	64.24	.6	79.21	.6	96.40
.8	.75	.8	.71	.8	.74	.8	97.02
83.0	52.15	89.0	65.18	95.0	80.28	101.0	.63
.2	.55	.2	.64	.2	.82	.2	98.25
.4	.96	.4	66.12	.4	81.37	.4	.87
.6	53.36	.6	.59	.6	.91	.6	99.50
.8	.77	.8	67.07	.8	82.46	.8	100.13
84.0	54.18	90.0	.54	96.0	83.01	102.0	.75
.2	.60	.2	68.03	.2	.57	.2	101.38
.4	55.01	.4	.51	.4	84.12	.4	102.02
.6	.40	.6	69.00	.6	.68	.6	.66
.8	.85	.8	.48	.8	85.25	.8	103.30

Table VIII.—FEMALES

Showing the normal *weight* in kilograms calculated from the circumference of the *chest* given in centimetres.

Chest in Centi- metres	Weight in Kilograms	Chest in Centi- metres	Weight in Kilograms	Chest in Centi- metres	Weight in Kilograms	Chest in Centi- metres	Weight in Kilograms
50.0	14.19	56.0	21.15	62.0	30.26	68.0	41.90
.2	.39	.2	.42	.2	.61	.2	42.33
.4	.59	.4	.69	.4	.96	.4	.77
.6	.80	.6	.96	.6	31.31	.6	43.21
.8	15.01	.8	22.23	.8	.66	.8	.66
51.0	.21	57.0	.51	63.0	32.02	69.0	44.11
.2	.43	.2	.79	.2	.38	.2	.56
.4	.64	.4	23.07	.4	.74	.4	45.01
.6	.85	.6	.35	.6	33.10	.6	.47
.8	16.07	.8	.64	.8	.47	.8	.94
52.0	.29	58.0	.93	64.0	.84	70.0	46.40
.2	.51	.2	24.22	.2	34.22	.2	.87
.4	.74	.4	.52	.4	.60	.4	47.34
.6	.96	.6	.81	.6	.97	.6	.81
.8	17.19	.8	25.11	.8	35.36	.8	48.29
53.0	.42	59.0	.41	65.0	.74	71.0	.78
.2	.65	.2	.72	.2	36.13	.2	49.26
.4	.89	.4	26.03	.4	.52	.4	.75
.6	18.13	.6	.34	.6	.92	.6	50.24
.8	.37	.8	.65	.8	37.32	.8	.74
54.0	.61	60.0	.96	66.0	.72	72.0	51.24
.2	.85	.2	27.28	.2	38.12	.2	.74
.4	19.10	.4	.60	.4	.53	.4	52.25
.6	.34	.6	.93	.6	.94	.6	.76
.8	.60	.8	28.25	.8	39.35	.8	53.27
55.0	.85	61.0	.58	67.0	.77	73.0	.79
.2	20.10	.2	.91	.2	40.19	.2	54.31
.4	.36	.4	29.25	.4	.61	.4	.83
.6	.62	.6	.58	.6	41.04	.6	55.36
.8	.88	.8	.92	.8	.47	.8	.89

Table VIII.—FEMALES (*Continued*)

Showing the normal *weight* in kilograms calculated from the circumference of the *chest* given in centimetres.

Chest in Centi- metres	Weight in Kilograms	Chest in Centi- metres	Weight in Kilograms	Chest in Centi- metres	Weight in Kilograms	Chest in Centi- metres	Weight in Kilograms
74.0	56.43	78.0	67.92	82.0	80.99	86.0	95.79
.2	.96	.2	68.54	.2	81.69	.2	96.57
.4	57.51	.4	69.15	.4	82.40	.4	97.36
.6	58.06	.6	.78	.6	83.10	.6	98.15
.8	.60	.8	70.41	.8	.81	.8	.96
75.0	59.16	79.0	71.04	83.0	84.53	87.0	99.77
.2	.72	.2	.67	.2	85.25	.2	100.58
.4	60.28	.4	72.31	.4	.98	.4	101.39
.6	.84	.6	.95	.6	86.70	.6	102.20
.8	61.41	.8	73.60	.8	87.43	.8	103.03
76.0	.98	80.0	74.25	84.0	88.17	88.0	.86
.2	62.56	.2	.91	.2	.91	.2	104.70
.4	63.14	.4	75.57	.4	89.65	.4	105.53
.6	.72	.6	76.23	.6	90.41	.6	106.37
.8	64.31	.8	.90	.8	91.16	.8	107.22
77.0	.90	81.0	77.58	85.0	.92	89.0	108.08
.2	65.50	.2	78.25	.2	92.69	.2	.93
.4	66.10	.4	.93	.4	93.45	.4	109.80
.6	.70	.6	79.61	.6	94.22	.6	110.67
.8	67.31	.8	80.30	.8	95.01	.8	111.54

Table IX.—FEMALES

Showing the normal circumference of the *chest* in centimetres calculated from the length of the *trunk* given in centimetres.

Length in Centi- metres	Chest in Centi- metres	Length in Centi- metres	Chest in Centi- metres	Length in Centi- metres	Chest in Centi- metres	Length in Centi- metres	Chest in Centi- metres
55.0	49.81	61.0	54.72	67.0	59.58	73.0	64.41
.2	.98	.2	.88	.2	.75	.2	.57
.4	50.14	.4	55.05	.4	.91	.4	.73
.6	.31	.6	.21	.6	60.07	.6	.89
.8	.47	.8	.37	.8	.23	.8	65.05
56.0	.64	62.0	.53	68.0	.39	74.0	.21
.2	.80	.2	.70	.2	.55	.2	.37
.4	.96	.4	.86	.4	.71	.4	.53
.6	51.13	.6	56.02	.6	.87	.6	.69
.8	.29	.8	.18	.8	61.03	.8	.84
57.0	.46	63.0	.35	69.0	.20	75.0	66.00
.2	.62	.2	.51	.2	.36	.2	.16
.4	.78	.4	.67	.4	.52	.4	.32
.6	.95	.6	.83	.6	.68	.6	.48
.8	52.11	.8	57.00	.8	.84	.8	.64
58.0	.27	64.0	.16	70.0	62.00	76.0	.80
.2	.44	.2	.32	.2	.16	.2	.96
.4	.60	.4	.48	.4	.32	.4	67.12
.6	.76	.6	.64	.6	.48	.6	.28
.8	.93	.8	.81	.8	.64	.8	.44
59.0	53.09	65.0	.97	71.0	.80	77.0	.60
.2	.25	.2	58.13	.2	.96	.2	.76
.4	.42	.4	.29	.4	63.12	.4	.92
.6	.58	.6	.45	.6	.28	.6	68.08
.8	.74	.8	.61	.8	.44	.8	.24
60.0	.91	66.0	.78	72.0	.60	78.0	.40
.2	54.03	.2	.94	.2	.77	.2	.56
.4	.23	.4	59.10	.4	.93	.4	.71
.6	.39	.6	.26	.6	64.09	.6	.87
.8	.56	.8	.42	.8	.25	.8	69.03

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Table IX.—FEMALES (*Continued*)

Showing the normal circumference of the *chest* in centimetres calculated from the length of the *trunk* given in centimetres.

Length in Centi- metres	Chest in Centi- metres	Length in Centi- metres	Chest in Centi- metres	Length in Centi- metres	Chest in Centi- metres	Length in Centi- metres	Chest in Centi- metres
79.0	69.19	85.0	73.94	91.0	78.66	97.0	83.36
.2	.35	.2	74.10	.2	.82	.2	.51
.4	.51	.4	.26	.4	.98	.4	.67
.6	.67	.6	.42	.6	79.14	.6	.83
.8	.83	.8	.58	.8	.29	.8	.98
80.0	.99	86.0	.73	92.0	.45	98.0	84.14
.2	70.15	.2	.89	.2	.61	.2	.29
.4	.30	.4	75.05	.4	.76	.4	.45
.6	.46	.6	.21	.6	.92	.6	.60
.8	.62	.8	.36	.8	80.07	.8	.76
81.0	.78	87.0	.52	93.0	.23	99.0	.92
.2	.94	.2	.68	.2	.39	.2	85.07
.4	71.10	.4	.84	.4	.55	.4	.23
.6	.26	.6	.99	.6	.70	.6	.38
.8	.41	.8	76.15	.8	.86	.8	.54
82.0	.57	88.0	.31	94.0	81.02	100.0	.69
.2	.73	.2	.46	.2	.17	.2	.85
.4	.89	.4	.62	.4	.33	.4	86.00
.6	72.05	.6	.78	.6	.48	.6	.16
.8	.20	.8	.94	.8	.64	.8	.31
83.0	.36	89.0	77.09	95.0	.79	101.0	.47
.2	.52	.2	.25	.2	.95	.2	.63
.4	.68	.4	.41	.4	82.11	.4	.78
.6	.84	.6	.57	.6	.26	.6	.94
.8	73.00	.8	.72	.8	.42	.8	87.09
84.0	.15	90.0	.88	96.0	.58	102.0	.25
.2	.31	.2	78.04	.2	.73	.2	.40
.4	.47	.4	.19	.4	.89	.4	.56
.6	.63	.6	.35	.6	83.05	.6	.71
.8	.79	.8	.51	.8	.20	.8	.89

Table X.—FEMALES

Showing the normal *vital capacity* in cubic centimetres calculated from the weight of the *body* given in kilograms.

Weight in Kilograms	Vital Capacity in Cubic Centimetres			Weight in Kilograms	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
15.0	1280	1169	1093	30.0	2109	1925	1801
.5	1311	1197	1119	.5	2134	1948	1822
16.0	1341	1224	1145	31.0	2159	1971	1844
.5	1371	1252	1171	.5	2184	1994	1865
17.0	1401	1279	1196	32.0	2209	2017	1886
.5	1430	1306	1222	.5	2234	2039	1908
18.0	1460	1333	1247	33.0	2258	2062	1929
.5	1489	1359	1271	.5	2283	2084	1950
19.0	1518	1386	1296	34.0	2307	2107	1971
.5	1546	1412	1321	.5	2332	2129	1991
20.0	1575	1438	1345	35.0	2356	2151	2012
.5	1603	1464	1369	.5	2380	2173	2033
21.0	1631	1489	1393	36.0	2404	2195	2053
.5	1659	1515	1417	.5	2428	2217	2074
22.0	1687	1540	1440	37.0	2452	2239	2094
.5	1714	1565	1464	.5	2476	2261	2115
23.0	1741	1590	1487	38.0	2500	2282	2135
.5	1769	1615	1510	.5	2523	2304	2155
24.0	1796	1639	1533	39.0	2547	2325	2175
.5	1823	1664	1556	.5	2571	2347	2195
25.0	1849	1688	1579	40.0	2594	2368	2215
.5	1876	1713	1602	.5	2617	2390	2235
26.0	1902	1737	1624	41.0	2640	2411	2255
.5	1928	1761	1647	.5	2664	2432	2275
27.0	1955	1785	1669	42.0	2687	2453	2294
.5	1981	1808	1691	.5	2710	2474	2314
28.0	2006	1832	1714	43.0	2733	2495	2334
.5	2032	1855	1735	.5	2755	2516	2353
29.0	2058	1879	1757	44.0	2778	2536	2372
.5	2083	1902	1779	.5	2801	2557	2392

Table X.—FEMALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the weight of the *body* given in kilograms.

Weight in Kilograms	Vital Capacity in Cubic Centimetres			Weight in Kilograms	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
45.0	2823	2578	2411	60.0	3473	3171	2966
.5	2846	2598	2431	.5	3494	3190	2984
46.0	2869	2619	2450	61.0	3515	3209	3002
.5	2891	2639	2469	.5	3536	3228	3019
47.0	2913	2660	2488	62.0	3556	3247	3037
.5	2936	2680	2507	.5	3577	3266	3055
48.0	2958	2700	2526	63.0	3597	3284	3072
.5	2980	2721	2545	.5	3618	3303	3090
49.0	3002	2741	2564	64.0	3638	3322	3107
.5	3024	2761	2583	.5	3659	3341	3125
50.0	3046	2781	2601	65.0	3679	3359	3142
.5	3068	2801	2620	.5	3700	3378	3160
51.0	3090	2821	2639	66.0	3720	3396	3177
.5	3111	2841	2657	.5	3740	3415	3194
52.0	3133	2861	2676	67.0	3760	3433	3211
.5	3155	2880	2694	.5	3781	3452	3229
53.0	3176	2900	2713	68.0	3801	3470	3246
.5	3198	2920	2731	.5	3821	3489	3263
54.0	3219	2939	2749	69.0	3841	3507	3280
.5	3241	2959	2768	.5	3861	3525	3297
55.0	3262	2979	2786	70.0	3881	3543	3314
.5	3284	2998	2804	.5	3901	3562	3331
56.0	3305	3017	2822	71.0	3921	3580	3348
.5	3326	3037	2841	.5	3941	3598	3365
57.0	3347	3056	2859	72.0	3960	3616	3382
.5	3368	3075	2877	.5	3980	3634	3399
58.0	3390	3095	2895	73.0	4000	3652	3416
.5	3411	3114	2913	.5	4020	3670	3433
59.0	3431	3133	2930	74.0	4039	3688	3450
.5	3452	3152	2948	.5	4059	3706	3466

Table X.—FEMALES (Continued)

Showing the normal *rital capacity* in cubic centimetres calculated from the weight of the *body* given in kilograms.

Weight in Kilograms	Vital Capacity in Cubic Centimetres			Weight in Kilograms	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
75.0	4079	3724	3483	90.0	4651	4246	3972
.5	4098	3742	3500	.5	4669	4263	3988
76.0	4118	3759	3516	91.0	4688	4280	4003
.5	4137	3777	3533	.5	4706	4297	4019
77.0	4157	3795	3550	92.0	4725	4314	4035
.5	4176	3813	3566	.5	4743	4331	4051
78.0	4195	3830	3583	93.0	4762	4348	4067
.5	4215	3848	3599	.5	4780	4364	4082
79.0	4234	3866	3616	94.0	4799	4381	4098
.5	4253	3883	3632	.5	4817	4398	4114
80.0	4273	3901	3649	95.0	4835	4415	4129
.5	4292	3918	3665	.5	4854	4431	4145
81.0	4311	3936	3682	96.0	4872	4448	4161
.5	4330	3953	3698	.5	4890	4465	4176
82.0	4349	3971	3714	97.0	4908	4481	4192
.5	4368	3988	3730	.5	4927	4498	4207
83.0	4387	4006	3747	98.0	4945	4515	4223
.5	4406	4023	3763	.5	4963	4531	4238
84.0	4425	4040	3779	99.0	4981	4548	4254
.5	4445	4058	3796	.5	4999	4564	4269
85.0	4463	4075	3812	100.0	5017	4581	4285
.5	4482	4092	3828				
86.0	4501	4109	3844				
.5	4520	4127	3860				
87.0	4539	4144	3876				
.5	4557	4161	3892				
88.0	4576	4178	3908				
.5	4595	4195	3924				
89.0	4613	4212	3940				
.5	4632	4229	3956				

Table XI.—FEMALES

Showing the normal *vital capacity* in cubic centimetres calculated from the length of the *trunk* given in centimetres.

Length in Centi- metres	Vital Capacity in Cubic Centimetres			Length in Centi- metres	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
55.0	1218	1112	1040	61.0	1546	1412	1320
.2	1229	1122	1049	.2	1558	1422	1330
.4	1239	1131	1058	.4	1570	1433	1340
.6	1249	1140	1067	.6	1581	1444	1350
.8	1260	1150	1076	.8	1593	1455	1361
56.0	1270	1159	1085	62.0	1605	1465	1371
.2	1280	1169	1094	.2	1617	1476	1381
.4	1291	1179	1102	.4	1629	1487	1391
.6	1302	1188	1112	.6	1641	1498	1401
.8	1312	1198	1121	.8	1653	1509	1412
57.0	1323	1208	1130	63.0	1665	1520	1422
.2	1333	1217	1139	.2	1677	1531	1432
.4	1344	1227	1148	.4	1690	1543	1443
.6	1355	1237	1157	.6	1702	1554	1453
.8	1366	1247	1166	.8	1714	1565	1464
58.0	1377	1257	1176	64.0	1727	1576	1475
.2	1388	1267	1185	.2	1739	1588	1485
.4	1399	1277	1194	.4	1752	1599	1496
.6	1410	1287	1204	.6	1764	1611	1507
.8	1421	1297	1213	.8	1777	1622	1517
59.0	1432	1307	1223	65.0	1789	1634	1528
.2	1443	1318	1232	.2	1802	1645	1539
.4	1454	1328	1242	.4	1815	1657	1550
.6	1466	1338	1252	.6	1827	1668	1561
.8	1477	1348	1261	.8	1840	1680	1572
60.0	1488	1359	1271	66.0	1853	1692	1583
.2	1500	1369	1281	.2	1866	1704	1594
.4	1511	1380	1291	.4	1879	1716	1605
.6	1523	1390	1301	.6	1892	1728	1616
.8	1534	1401	1310	.8	1905	1740	1627

Table XI.—FEMALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the length of the *trunk* given in centimetres.

Length in Centi- metres	Vital Capacity in Cubic Centimetres			Length in Centi- metres	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
67.0	1918	1752	1638	73.0	2337	2133	1996
.2	1932	1764	1650	.2	2352	2147	2008
.4	1945	1776	1661	.4	2366	2161	2021
.6	1958	1788	1672	.6	2381	2174	2034
.8	1972	1800	1684	.8	2396	2188	2046
68.0	1985	1812	1695	74.0	2411	2201	2059
.2	1998	1824	1707	.2	2426	2215	2072
.4	2012	1837	1718	.4	2441	2229	2085
.6	2025	1849	1730	.6	2456	2243	2098
.8	2039	1862	1741	.8	2471	2256	2111
69.0	2053	1874	1753	75.0	2487	2270	2124
.2	2067	1887	1765	.2	2502	2284	2137
.4	2080	1899	1777	.4	2517	2298	2150
.6	2094	1912	1788	.6	2533	2312	2163
.8	2108	1925	1800	.8	2548	2326	2176
70.0	2122	1937	1812	76.0	2564	2341	2189
.2	2136	1950	1824	.2	2579	2355	2203
.4	2150	1963	1836	.4	2595	2369	2216
.6	2164	1976	1848	.6	2610	2383	2229
.8	2178	1988	1860	.8	2626	2398	2243
71.0	2192	2001	1872	77.0	2642	2412	2256
.2	2206	2014	1884	.2	2658	2427	2270
.4	2221	2028	1897	.4	2674	2441	2283
.6	2235	2041	1909	.6	2689	2455	2297
.8	2249	2054	1921	.8	2706	2470	2311
72.0	2264	2067	1933	78.0	2721	2485	2324
.2	2278	2080	1946	.2	2738	2499	2338
.4	2293	2093	1958	.4	2754	2514	2352
.6	2308	2107	1971	.6	2770	2529	2365
.8	2322	2120	1983	.8	2786	2544	2379

Table XI.—FEMALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the length of the *trunk* given in centimetres.

Length in Centi- metres	Vital Capacity in Cubic Centimetres			Length in Centi- metres	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
79.0	2803	2559	2393	85.0	3316	3028	2832
.2	2819	2574	2407	.2	3334	3044	2848
.4	2835	2589	2421	.4	3352	3061	2863
.6	2852	2603	2435	.6	3370	3077	2878
.8	2868	2619	2449	.8	3389	3094	2894
80.0	2885	2634	2464	86.0	3407	3110	2909
.2	2901	2649	2478	.2	3425	3127	2925
.4	2918	2664	2492	.4	3443	3144	2941
.6	2935	2679	2506	.6	3462	3160	2956
.8	2952	2695	2521	.8	3480	3177	2972
81.0	2968	2710	2535	87.0	3499	3194	2988
.2	2985	2726	2549	.2	3517	3211	3004
.4	3002	2741	2564	.4	3536	3228	3020
.6	3019	2756	2578	.6	3554	3245	3035
.8	3036	2772	2593	.8	3573	3262	3051
82.0	3053	2788	2607	88.0	3592	3279	3067
.2	3070	2803	2622	.2	3611	3297	3084
.4	3088	2819	2637	.4	3629	3314	3100
.6	3105	2835	2652	.6	3648	3331	3116
.8	3122	2851	2666	.8	3667	3348	3132
83.0	3140	2867	2681	89.0	3686	3366	3148
.2	3157	2882	2696	.2	3705	3383	3164
.4	3175	2898	2711	.4	3725	3401	3181
.6	3192	2914	2726	.6	3744	3418	3197
.8	3210	2930	2741	.8	3763	3436	3214
84.0	3227	2947	2756	90.0	3782	3453	3230
.2	3245	2963	2771	.2	3802	3471	3247
.4	3263	2979	2786	.4	3821	3489	3263
.6	3281	2995	2802	.6	3841	3507	3280
.8	3299	3012	2818	.8	3860	3524	3297

Table XI.—FEMALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the length of the *trunk* given in centimetres.

Length in Centi- metres	Vital Capacity in Cubic Centimetres			Length in Centi- metres	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
91.0	3880	3542	3313	97.0	4494	4103	3838
.2	3899	3560	3330	.2	4515	4122	3856
.4	3919	3578	3347	.4	4536	4142	3874
.6	3939	3596	3364	.6	4558	4161	3892
.8	3959	3614	3381	.8	4579	4181	3911
92.0	3979	3633	3398	98.0	4601	4201	3929
.2	3998	3651	3415	.2	4622	4220	3948
.4	4018	3669	3432	.4	4644	4240	3966
.6	4038	3687	3449	.6	4666	4260	3985
.8	4059	3706	3466	.8	4688	4280	4003
93.0	4079	3724	3483	99.0	4710	4300	4022
.2	4099	3742	3500	.2	4731	4320	4041
.4	4119	3761	3518	.4	4754	4340	4060
.6	4140	3780	3535	.6	4776	4360	4078
.8	4160	3798	3553	.8	4798	4380	4097
94.0	4180	3817	3570	100.0	4820	4400	4116
.2	4201	3835	3588	.2	4842	4421	4135
.4	4221	3854	3605	.4	4864	4441	4154
.6	4242	3873	3623	.6	4887	4461	4173
.8	4263	3892	3640	.8	4909	4482	4192
95.0	4283	3911	3658	101.0	4931	4502	4211
.2	4304	3930	3676	.2	4954	4523	4231
.4	4325	3949	3694	.4	4976	4543	4250
.6	4346	3968	3711	.6	4999	4564	4269
.8	4367	3987	3729	.8	5022	4585	4289
96.0	4388	4006	3747	102.0	5044	4605	4308
.2	4409	4025	3765	.2	5067	4626	4327
.4	4430	4045	3783	.4	5090	4647	4347
.6	4451	4064	3801	.6	5113	4668	4366
.8	4472	4083	3819	.8	5136	4689	4386

Table XII.—FEMALES

Showing the normal *vital capacity* in cubic centimetres calculated from the circumference of the *chest* given in centimetres.

Chest in Centi- metres	Vital Capacity in Cubic Centimetres			Chest in Centi- metres	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
55.0	1566	1430	1337	61.0	2036	1859	1739
.2	1581	1443	1350	.2	2053	1875	1753
.4	1595	1456	1362	.4	2070	1890	1768
.6	1610	1470	1375	.6	2087	1906	1783
.8	1625	1483	1387	.8	2105	1922	1797
56.0	1639	1497	1400	62.0	2122	1937	1812
.2	1654	1510	1413	.2	2139	1953	1827
.4	1669	1524	1426	.4	2157	1969	1842
.6	1684	1538	1438	.6	2174	1985	1857
.8	1701	1553	1453	.8	2192	2001	1872
57.0	1715	1565	1464	63.0	2210	2018	1887
.2	1730	1579	1477	.2	2228	2034	1902
.4	1745	1593	1490	.4	2246	2050	1918
.6	1761	1607	1504	.6	2264	2067	1933
.8	1776	1622	1517	.8	2282	2083	1949
58.0	1792	1636	1531	64.0	2300	2100	1964
.2	1808	1650	1544	.2	2318	2116	1980
.4	1823	1665	1557	.4	2336	2133	1995
.6	1839	1679	1571	.6	2355	2150	2011
.8	1855	1694	1584	.8	2373	2167	2027
59.0	1871	1708	1598	65.0	2392	2184	2043
.2	1887	1723	1612	.2	2411	2201	2059
.4	1904	1738	1626	.4	2430	2218	2075
.6	1920	1753	1640	.6	2448	2235	2091
.8	1936	1768	1654	.8	2467	2253	2107
60.0	1953	1783	1668	66.0	2486	2270	2123
.2	1969	1798	1682	.2	2506	2288	2140
.4	1986	1813	1696	.4	2525	2305	2156
.6	2003	1828	1710	.6	2544	2323	2173
.8	2019	1844	1725	.8	2564	2341	2189

Table XII.—FEMALES (Continued)

Showing the normal *vital capacity* in cubic centimetres calculated from the circumference of the *chest* given in centimetres.

Chest in Centi- metres	Vital Capacity in Cubic Centimetres			Chest in Centi- metres	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
67.0	2583	2358	2206	73.0	3210	2931	2742
.2	2603	2376	2223	.2	3233	2952	2761
.4	2622	2394	2239	.4	3255	2972	2780
.6	2642	2412	2256	.6	3278	2992	2799
.8	2662	2430	2273	.8	3300	3013	2819
68.0	2682	2449	2290	74.0	3323	3034	2838
.2	2702	2467	2307	.2	3346	3055	2857
.4	2722	2485	2325	.4	3369	3076	2877
.6	2742	2504	2342	.6	3392	3097	2897
.8	2763	2522	2359	.8	3415	3118	2916
69.0	2783	2541	2377	75.0	3438	3139	2936
.2	2804	2560	2394	.2	3461	3160	2956
.4	2824	2578	2412	.4	3485	3182	2976
.6	2845	2597	2429	.6	3508	3203	2996
.8	2866	2616	2447	.8	3532	3225	3016
70.0	2886	2635	2465	76.0	3555	3246	3036
.2	2907	2654	2483	.2	3579	3268	3057
.4	2928	2674	2501	.4	3603	3290	3077
.6	2949	2693	2519	.6	3627	3312	3098
.8	2971	2712	2537	.8	3651	3333	3118
71.0	2992	2732	2555	77.0	3675	3356	3139
.2	3013	2751	2573	.2	3700	3378	3159
.4	3035	2771	2592	.4	3724	3400	3180
.6	3057	2791	2610	.6	3748	3422	3201
.8	3078	2810	2629	.8	3773	3445	3222
72.0	3100	2830	2647	78.0	3797	3467	3243
.2	3122	2850	2666	.2	3822	3490	3264
.4	3144	2870	2685	.4	3847	3512	3285
.6	3166	2891	2704	.6	3872	3535	3307
.8	3188	2911	2723	.8	3897	3558	3328

Table XII.—FEMALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the circumference of the *chest* given in centimeters.

Chest in Centi- metres	Vital Capacity in Cubic Centimetres			Chest in Centi- metres	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
79.0	3926	3584	3353	85.0	4722	4311	4033
.2	3947	3604	3371	.2	4750	4337	4057
.4	3973	3627	3393	.4	4779	4363	4081
.6	3998	3650	3414	.6	4807	4389	4105
.8	4024	3674	3436	.8	4835	4415	4129
80.0	4049	3697	3458	86.0	4864	4441	4154
.2	4075	3720	3480	.2	4893	4467	4178
.4	4101	3744	3502	.4	4921	4493	4203
.6	4127	3768	3524	.6	4950	4520	4228
.8	4153	3791	3546	.8	4980	4546	4253
81.0	4179	3815	3569	87.0	5009	4573	4277
.2	4205	3839	3591	.2	5038	4600	4303
.4	4231	3863	3613	.4	5067	4626	4327
.6	4258	3887	3636	.6	5097	4653	4353
.8	4284	3911	3659	.8	5126	4680	4378
82.0	4311	3936	3681	88.0	5156	4707	4403
.2	4337	3960	3704	.2	5186	4735	4429
.4	4364	3985	3727	.4	5215	4762	4454
.6	4391	4009	3750	.6	5245	4789	4480
.8	4418	4034	3773	.8	5276	4817	4505
83.0	4445	4059	3796	89.0	5306	4844	4531
.2	4472	4083	3819	.2	5336	4872	4557
.4	4500	4108	3843	.4	5367	4900	4583
.6	4527	4133	3866	.6	5397	4928	4609
.8	4555	4158	3890	.8	5428	4955	4635
84.0	4582	4184	3913	90.0	5458	4983	4661
.2	4610	4209	3937				
.4	4638	4234	3961				
.6	4666	4260	3985				
.8	4694	4286	4009				

Table XIII.—MALES

Showing the normal *weight* of the body in pounds and decimals of pounds, and in pounds and ounces, calculated from the length of the *trunk* given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Weight in Pounds and Decimals of Pounds	Weight in Pounds and Ounces
24-0	41.95	41 15
-1	42.64	42 10
-2	43.33	43 5
-3	44.03	44 1
-4	44.75	44 12
-5	45.47	45 8
-6	46.20	46 3
-7	46.93	46 15
25-0	47.67	47 11
-1	48.43	48 7
-2	49.18	49 3
-3	49.95	49 15
-4	50.73	50 12
-5	51.51	51 8
-6	52.30	52 5
-7	53.10	53 2
26-0	53.91	53 15
-1	54.73	54 12
-2	55.55	55 9
-3	56.39	56 6
-4	57.23	57 4
-5	58.08	58 1
-6	58.94	58 15
-7	59.81	59 13
27-0	60.68	60 11
-1	61.57	61 9
-2	62.46	62 7
-3	63.36	63 6
-4	64.27	64 4
-5	65.19	65 3
-6	66.12	66 2
-7	67.06	67 1

Table XIII.—MALES (*Continued*)

Showing the normal *weight* of the body in pounds and decimals of pounds, and in pounds and ounces, calculated from the length of the *trunk* given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Weight in Pounds and Decimals of Pounds	Weight in Pounds and Ounces
28-0	68.01	68 0
-1	68.96	68 15
-2	69.93	69 15
-3	70.91	70 14
-4	71.89	71 14
-5	72.88	72 14
-6	73.89	73 14
-7	74.90	74 14
29-0	75.92	75 15
-1	76.95	76 15
-2	77.99	78 0
-3	79.04	79 1
-4	80.10	80 2
-5	81.17	81 3
-6	82.25	82 4
-7	83.33	83 5
30-0	84.43	84 7
-1	85.54	85 9
-2	86.65	86 10
-3	87.79	87 13
-4	88.92	88 15
-5	90.07	90 1
-6	91.22	91 4
-7	92.39	92 6
31-0	93.57	93 9
-1	94.76	94 12
-2	95.96	95 15
-3	97.16	97 3
-4	98.38	98 6
-5	99.61	99 10
-6	100.85	100 14
-7	102.10	102 2

Table XIII.—MALES (*Continued*)

Showing the normal *weight* of the body in pounds and decimals of pounds, and in pounds and ounces, calculated from the length of the *trunk* given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Weight in Pounds and Decimals of Pounds	Weight in Pounds and Ounces
32-0	103.36	103 6
-1	104.63	104 10
-2	105.91	105 15
-3	107.21	107 3
-4	108.51	108 8
-5	109.82	109 13
-6	111.15	111 2
-7	112.49	112 8
33-0	113.83	113 13
-1	115.19	115 3
-2	116.55	116 9
-3	117.93	117 15
-4	119.32	119 5
-5	120.72	120 12
-6	122.13	122 2
-7	123.56	123 9
34-0	125.00	125 0
-1	126.44	126 7
-2	127.90	127 14
-3	129.37	129 6
-4	130.85	130 14
-5	132.34	132 5
-6	133.84	133 14
-7	135.35	135 6
35-0	136.89	136 14
-1	138.43	138 7
-2	139.98	140 0
-3	141.54	141 9
-4	143.11	143 2
-5	144.69	144 11
-6	146.30	146 5
-7	147.90	147 14

Table XIII.—MALES (*Continued*)

Showing the normal *weight* of the body in pounds and decimals of pounds, and in pounds and ounces, calculated from the length of the *trunk* given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Weight in Pounds and Decimals of Pounds	Weight in Pounds and Ounces
36-0	149.52	149 8
-1	151.16	151 3
-2	152.81	152 13
-3	154.46	154 7
-4	156.13	156 2
-5	157.82	157 13
-6	159.51	159 8
-7	161.21	161 3
37-0	162.93	162 15
-1	164.67	164 11
-2	166.41	166 7
-3	168.17	168 3
-4	169.93	169 15
-5	171.72	171 12
-6	173.52	173 8
-7	175.32	175 5
38-0	177.14	177 2
-1	178.97	179 0
-2	180.82	180 13
-3	182.68	182 11
-4	184.55	184 9
-5	186.44	186 7
-6	188.33	188 5
-7	190.24	190 4
39-0	192.16	192 3
-1	194.10	194 2
-2	196.06	196 1
-3	198.02	198 0
-4	200.00	200 0
-5	201.99	202 0
-6	204.00	204 0
-7	206.01	206 0

Table XIII.—MALES (*Continued*)

Showing the normal *weight* of the body in pounds and decimals of pounds, and in pounds and ounces, calculated from the length of the *trunk* given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Weight in Pounds and Decimals of Pounds	Weight in Pounds and Ounces
40-0	208.04	208 1
-1	210.09	210 1
-2	212.15	212 2
-3	214.22	214 4
-4	216.31	216 5
-5	218.40	218 6
-6	220.52	220 8
-7	222.65	222 10
41-0	224.78	224 12
-1	226.94	226 15
-2	229.10	229 2
-3	231.30	231 5
-4	233.50	233 8
-5	235.70	235 11
-6	237.94	237 15
-7	240.16	240 3
42-0	242.43	242 7
-1	244.69	244 11
-2	246.98	247 0
-3	249.28	249 4
-4	251.59	251 9
-5	253.90	253 14
-6	256.26	256 4
-7	258.60	258 10
43-0	260.98	261 0
-1	263.37	263 6
-2	265.77	265 12
-3	268.18	268 3
-4	270.61	270 10
-5	273.07	273 1
-6	275.52	275 8
-7	278.00	278 0

Table XIII—MALES (Continued)

Showing the normal weight of the body in pounds and decimals of pounds, and in pounds and ounces calculated from the length of the trunk given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Weight in Pounds and Decimals of Pounds	Weight in Pounds and Ounces
44-0	280.46	280 0
-1	282.98	283 0
-2	285.50	285 0
-3	288.05	288 1
-4	290.60	290 10
-5	293.17	293 3
-6	295.74	295 12
-7	298.33	298 5
45-0	300.95	300 15
-1	303.59	303 9
-2	306.23	306 4
-3	308.89	308 14
-4	311.56	311 9
-5	314.25	314 4
-6	316.96	316 15
-7	319.69	319 11
46-0	322.43	322 7

Table XIV.—MALES

Showing the normal *weight* of the body in pounds and decimals of pounds, and in pounds and ounces, calculated from the circumference of the *chest* given in inches and eighths of inches.

Chest in Inches and Eighths of Inches	Weight in Pounds and Decimals of Pounds	Weight in Pounds and Ounces
21-0	38.39	38 6
-1	39.02	39 0
-2	39.65	39 15
-3	40.30	40 5
-4	40.94	40 15
-5	41.60	41 10
-6	42.17	42 3
-7	42.93	42 15
22-0	43.60	43 10
-1	44.29	44 5
-2	44.98	45 0
-3	45.67	45 11
-4	46.37	46 6
-5	47.09	47 1
-6	47.80	47 13
-7	48.52	48 9
23-0	49.25	49 4
-1	49.99	50 0
-2	50.73	50 12
-3	51.48	51 8
-4	52.24	52 4
-5	53.01	53 0
-6	53.78	53 12
-7	54.56	54 9
24-0	55.34	55 6
-1	56.19	56 3
-2	56.94	56 15
-3	57.74	57 12
-4	58.56	58 9
-5	59.38	59 6
-6	60.21	60 3
-7	61.05	61 1

Table XIV.—MALES (*Continued*)

Showing the normal *weight* of the body in pounds and decimals of pounds, and in pounds and ounces, calculated from the circumference of the *chest* given in inches and eighths of inches.

Chest in Inches and Eighths of Inches	Weight in Pounds and Decimals of Pounds	Weight in Pounds and Ounces
25-0	61.89	61 14
-1	62.75	62 12
-2	63.60	63 10
-3	64.47	64 8
-4	65.35	65 6
-5	66.22	66 4
-6	67.12	67 2
-7	68.01	68 0
26-0	68.91	68 15
-1	69.83	69 13
-2	70.75	70 12
-3	71.67	71 11
-4	72.61	72 10
-5	73.55	73 9
-6	74.50	74 8
-7	75.46	75 7
27-0	76.42	76 7
-1	77.39	77 6
-2	78.38	78 6
-3	79.36	79 6
-4	80.36	80 6
-5	81.37	81 6
-6	82.38	82 6
-7	83.40	83 6
28-0	84.43	84 7
-1	85.46	85 7
-2	86.51	86 8
-3	87.57	87 9
-4	88.62	88 10
-5	89.70	89 11
-6	90.77	90 12
-7	91.86	91 14

Table XIV.—MALES (*Continued*)

Showing the normal *weight* of the body in pounds and decimals of pounds, and in pound and ounces, calculated from the circumference of the *chest* given in inches and eighths of inches.

Chest in Inches and Eighths of Inches	Weight in Pounds and Decimals of Pounds	Weight in Pounds and Ounces
29-0	92.95	92 15
-1	94.05	94 1
-2	95.16	95 3
-3	96.28	96 4
-4	97.41	97 6
-5	98.54	98 9
-6	99.69	99 11
-7	100.84	100 13
30-0	102.00	102 0
-1	103.16	103 3
-2	104.34	104 5
-3	105.53	105 8
-4	106.72	106 12
-5	107.92	107 15
-6	109.14	109 2
-7	110.35	110 6
31-0	111.58	111 9
-1	112.82	112 13
-2	114.06	114 1
-3	115.32	115 5
-4	116.58	116 9
-5	117.85	117 14
-6	119.13	119 2
-7	120.42	120 7
32-0	121.72	121 12
-1	123.03	123 0
-2	124.35	124 6
-3	125.67	125 11
-4	127.00	127 0
-5	128.35	128 6
-6	129.70	129 11
-7	131.06	131 1

Table XIV.—MALES (*Continued*)

Showing the normal *weight* of the body in pounds and decimals of pounds, and in pounds and ounces, calculated from the circumference of the *chest* given in inches and eighths of inches.

Chest in Inches and Eighths of Inches	Weight in Pounds and Decimals of Pounds	Weight in Pounds and Ounces
33-0	132.42	132 7
-1	133.81	133 13
-2	135.20	135 3
-3	136.59	136 9
-4	137.99	138 0
-5	139.41	139 7
-6	140.84	140 13
-7	142.27	142 4
34-0	143.72	143 12
-1	145.16	145 3
-2	146.63	146 10
-3	148.10	148 2
-4	149.58	149 9
-5	151.07	151 1
-6	152.56	152 9
-7	154.07	154 1
35-0	155.60	155 10
-1	157.13	157 2
-2	158.66	158 11
-3	160.21	160 3
-4	161.76	161 12
-5	163.32	163 5
-6	164.94	164 15
-7	166.48	166 8
36-0	168.08	168 1
-1	169.69	169 11
-2	171.30	171 5
-3	172.92	172 15
-4	174.55	174 9
-5	176.20	176 3
-6	177.85	177 14
-7	179.51	179 8

Table XIV.—MALES (*Continued*)

Showing the normal *weight* of the body in pounds and decimals of pounds, and in pounds and ounces, calculated from the circumference of the *chest* given in inches and eighths of inches.

Chest in Inches and Eighths of Inches	Weight in Pounds and Decimals of Pounds	Weight in Pounds and Ounces
37-0	181.18	181 3
-1	182.87	182 14
-2	184.56	184 9
-3	186.26	186 4
-4	187.97	188 0
-5	189.69	189 11
-6	191.43	191 7
-7	193.16	193 3
38-0	194.91	194 15
-1	196.68	196 11
-2	198.44	198 7
-3	200.23	200 4
-4	202.02	202 0
-5	203.83	203 13
-6	205.64	205 10
-7	207.46	207 7
39-0	209.29	209 5
-1	211.13	211 2
-2	212.99	213 0
-3	214.85	214 14
-4	216.73	216 12
-5	218.61	218 10
-6	220.51	220 8
-7	222.41	222 7
40-0	224.33	224 5
-1	226.26	226 4
-2	228.19	228 3
-3	230.13	230 2
-4	232.10	232 2
-5	234.06	234 1
-6	236.04	236 0
-7	238.03	238 0

Table XIV.—MALES (*Continued*)

Showing the normal *weight* of the body in pounds and decimals of pounds, and in pounds and ounces, calculated from the circumference of the *chest* given in inches and eighths of inches.

Chest in Inches and Eighths of Inches	Weight in Pounds and Decimals of Pounds	Weight in Pounds and Ounces
41-0	240.02	240 0
-1	242.04	242 1
-2	244.05	244 1
-3	246.09	246 1
-4	248.13	248 2
-5	250.18	250 3
-6	252.25	252 4
-7	254.31	254 5
42-0	256.41	256 7
-1	258.51	258 8
-2	260.62	260 10
-3	262.73	262 12
-4	264.86	264 14
-5	266.99	267 0
-6	269.15	269 2
-7	271.30	271 5
43-0	273.48	273 8
-1	275.66	275 11
-2	277.87	277 14
-3	280.07	280 1
-4	282.28	282 4
-5	284.52	284 8
-6	286.75	286 12
-7	289.00	289 0
44-0	291.25	291 4
-1	293.52	293 8
-2	295.81	295 13
-3	298.11	298 2
-4	300.42	300 7
-5	302.74	302 12
-6	305.06	305 1
-7	307.40	307 6

Table XV.—MALES

Showing the normal circumference of the *chest* in inches and decimals of inches, and in inches and eighths of inches, calculated from the length of the *trunk* given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Chest in Inches and Decimals of Inches	Chest in Inches and Eighths of Inches	Length in Inches and Eighths of Inches	Chest in Inches and Decimals of Inches	Chest in Inches and Eighths of Inches
24-0	21.69	21-6	28-0	25.87	25-7
-1	.82	-7	-1	26.01	26-0
-2	.95	22-0	-2	.14	-1
-3	22.08	-1	-3	.27	-2
-4	.21	-2	-4	.40	-3
-5	.34	-3	-5	.54	-4
-6	.47	-4	-6	.67	-5
-7	.60	-5	-7	.80	-6
25-0	.73	-6	29-0	.94	-7
-1	.86	-7	-1	27.07	27-1
-2	.99	23-0	-2	.20	-2
-3	23.12	-1	-3	.33	-3
-4	.25	-2	-4	.47	-4
-5	.38	-3	-5	.60	-5
-6	.51	-4	-6	.73	-6
-7	.64	-5	-7	.87	-7
26-0	.77	-6	30-0	28.00	28-0
-1	.90	-7	-1	.13	-1
-2	24.03	24-0	-2	.20	-2
-3	.16	-1	-3	.40	-3
-4	.30	-2	-4	.53	-4
-5	.43	-3	-5	.67	-5
-6	.56	-4	-6	.80	-6
-7	.69	-5	-7	.94	-7
27-0	.81	-6	31-0	29.07	29-1
-1	.95	25-0	-1	.20	-2
-2	25.08	-1	-2	.34	-3
-3	.21	-2	-3	.47	-4
-4	.35	-3	-4	.61	-5
-5	.48	-4	-5	.74	-6
-6	.61	-5	-6	.88	-7
-7	.74	-6	-7	30.01	30-0

Table XV.—MALES (*Continued*)

Showing the normal circumference of the *chest* in inches and decimals of inches, and in inches and eighths of inches, calculated from the length of the *trunk* given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Chest in Inches and Decimals of Inches	Chest in Inches and Eighths of Inches	Length in Inches and Eighths of Inches	Chest in Inches and Decimals of Inches	Chest in Inches and Eighths of Inches
32-0	30.15	30-1	36-0	34.50	34-4
-1	.28	-2	-1	.63	-5
-2	.42	-3	-2	.77	-6
-3	.55	-4	-3	.91	-7
-4	.69	-5	-4	35.04	35-0
-5	.82	-7	-5	.18	-1
-6	.96	31-0	-6	.32	-3
-7	31.09	-1	-7	.46	-4
33-0	.23	-2	37-0	.59	-5
-1	.36	-3	-1	.73	-6
-2	.50	-4	-2	.87	-7
-3	.63	-5	-3	36.01	36-0
-4	.77	-6	-4	.14	-1
-5	.90	-7	-5	.28	-2
-6	32.04	32-0	-6	.42	-3
-7	.18	-1	-7	.56	-4
34-0	.31	-2	38-0	.70	-6
-1	.45	-4	-1	.83	-7
-2	.58	-5	-2	.97	37-0
-3	.72	-6	-3	37.11	-1
-4	.86	-7	-4	.25	-2
-5	.99	33-0	-5	.39	-3
-6	33.13	-1	-6	.53	-4
-7	.26	-2	-7	.66	-5
35-0	.40	-3	39-0	.80	-6
-1	.54	-4	-1	.94	38-0
-2	.67	-5	-2	38.08	-1
-3	.81	-6	-3	.22	-2
-4	.95	34-0	-4	.36	-3
-5	34.08	-1	-5	.50	-4
-6	.22	-2	-6	.64	-5
-7	.36	-3	-7	.78	-6

Table XV.—MALES (*Continued*)

Showing the normal circumference of the *chest* in inches and decimals of inches, and in inches and eighths of inches, calculated from the length of the *trunk* given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Chest in Inches and Decimals of Inches	Chest in Inches and Eighths of Inches	Length in Inches and Eighths of Inches	Chest in Inches and Decimals of Inches	Chest in Inches and Eighths of Inches
40-0	38.91	38-7	43-0	42.27	42-2
-1	39.05	39-0	-1	.41	-3
-2	.19	-2	-2	.55	-4
-3	.33	-3	-3	.69	-6
-4	.47	-4	-4	.83	-7
-5	.61	-5	-5	.98	43-0
-6	.75	-6	-6	43.12	-1
-7	.89	-7	-7	.26	-2
41-0	40.03	40-0	44-0	.40	-3
-1	.17	-1	-1	.54	-4
-2	.31	-2	-2	.68	-5
-3	.45	-4	-3	.82	-7
-4	.59	-5	-4	.96	44-0
-5	.73	-6	-5	44.10	-1
-6	.87	-7	-6	.25	-2
-7	41.01	41-0	-7	.39	-3
42-0	.15	-1	45-0	.53	-4
-1	.29	-2	-1	.67	-5
-2	.43	-3	-2	.81	-6
-3	.47	-4	-3	.95	45-0
-4	.71	-6	-4	45.10	-1
-5	.85	-7	-5	.24	-2
-6	.99	42-0	-6	.38	-3
-7	42.13	-1	-7	.52	-4

Table XVI.—MALES

Showing the normal *vital capacity* in cubic centimetres calculated from the *weight* of the body given in pounds.

Weight in Pounds	Vital Capacity in Cubic Centimetres			Weight in Pounds	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
40	1688	1541	1442	70	2526	2306	2157
41	1719	1569	1468	71	2552	2330	2179
42	1749	1597	1493	72	2578	2353	2201
43	1779	1624	1519	73	2603	2377	2223
44	1808	1651	1544	74	2629	2400	2245
45	1838	1678	1569	75	2655	2424	2267
46	1867	1705	1594	76	2680	2447	2289
47	1896	1731	1619	77	2705	2470	2310
48	1925	1758	1644	78	2731	2493	2332
49	1954	1784	1669	79	2756	2516	2354
50	1983	1810	1693	80	2781	2539	2375
51	2011	1836	1717	81	2806	2562	2396
52	2039	1862	1742	82	2831	2584	2417
53	2067	1888	1766	83	2856	2607	2439
54	2095	1913	1790	84	2880	2630	2460
55	2123	1939	1813	85	2905	2652	2481
56	2151	1964	1837	86	2930	2675	2502
57	2179	1989	1861	87	2954	2697	2523
58	2206	2014	1884	88	2978	2719	2543
59	2233	2039	1907	89	3003	2742	2564
60	2261	2064	1931	90	3027	2764	2585
61	2288	2089	1954	91	3051	2786	2606
62	2315	2113	1977	92	3075	2808	2626
63	2341	2138	2000	93	3099	2830	2647
64	2368	2162	2022	94	3123	2852	2667
65	2395	2186	2045	95	3147	2873	2688
66	2421	2211	2068	96	3171	2895	2708
67	2448	2235	2090	97	3193	2915	2727
68	2474	2259	2113	98	3218	2938	2749
69	2500	2282	2135	99	3242	2951	2760

Table XVI.—MALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the *weight* of the body given in pounds.

Weight in Pounds	Vital Capacity in Cubic Centimetres			Weight in Pounds	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
100	3266	2981	2789	130	3945	3601	3369
101	3289	3003	2809	131	3966	3621	3387
102	3312	3024	2829	132	3988	3641	3406
103	3336	3046	2849	133	4010	3661	3424
104	3359	3067	2869	134	4031	3681	3443
105	3382	3088	2889	135	4053	3701	3461
106	3405	3109	2908	136	4075	3720	3480
107	3429	3130	2928	137	4096	3740	3498
108	3452	3151	2948	138	4118	3760	3517
109	3475	3172	2967	139	4139	3779	3535
110	3497	3193	2987	140	4161	3799	3553
111	3520	3214	3006	141	4182	3818	3572
112	3543	3235	3026	142	4203	3838	3590
113	3566	3256	3045	143	4225	3857	3608
114	3589	3276	3065	144	4246	3877	3626
115	3611	3297	3084	145	4267	3896	3644
116	3634	3318	3103	146	4288	3915	3662
117	3656	3338	3123	147	4309	3935	3680
118	3679	3359	3142	148	4331	3954	3698
119	3701	3379	3161	149	4352	3973	3716
120	3724	3400	3180	150	4373	3992	3734
121	3746	3420	3199	151	4394	4011	3752
122	3768	3440	3218	152	4414	4030	3770
123	3790	3461	3237	153	4435	4050	3788
124	3813	3481	3256	154	4456	4069	3806
125	3835	3501	3275	155	4477	4088	3823
126	3857	3521	3294	156	4498	4107	3841
127	3879	3541	3312	157	4519	4126	3859
128	3901	3561	3331	158	4539	4144	3877
129	3923	3581	3350	159	4560	4163	3894

Table XVI.—MALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the *weight* of the body given in pounds.

Weight in Pounds	Vital Capacity in Cubic Centimetres			Weight in Pounds	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
160	4581	4182	3912	190	5184	4733	4427
161	4601	4201	3929	191	5203	4751	4444
162	4622	4220	3947	192	5223	4769	4461
163	4642	4238	3965	193	5243	4787	4477
164	4663	4257	3982	194	5262	4804	4494
165	4683	4276	4000	195	5282	4822	4511
166	4704	4294	4017	196	5301	4840	4527
167	4724	4313	4034	197	5321	4858	4544
168	4744	4332	4052	198	5340	4876	4560
169	4765	4350	4069	199	5359	4893	4577
170	4785	4369	4086	200	5379	4911	4594
171	4805	4387	4104	201	5398	4929	4610
172	4825	4406	4121	202	5418	4946	4627
173	4846	4424	4138	203	5437	4964	4643
174	4866	4443	4155	204	5456	4981	4660
175	4886	4461	4173	205	5475	4999	4676
176	4906	4479	4190	206	5495	5017	4692
177	4926	4497	4207	207	5514	5034	4709
178	4946	4516	4224	208	5533	5052	4725
179	4966	4534	4241	209	5552	5069	4742
180	4986	4552	4258	210	5571	5087	4758
181	5006	4571	4275	211	5590	5104	4774
182	5026	4589	4292	212	5609	5121	4790
183	5046	4607	4309	213	5628	5139	4807
184	5066	4625	4326	214	5647	5156	4823
185	5085	4643	4343	215	5666	5173	4839
186	5105	4661	4360	216	5685	5191	4855
187	5125	4679	4377	217	5704	5208	4872
188	5145	4697	4394	218	5723	5225	4888
189	5164	4715	4410	219	5742	5243	4904

Table XVI.—MALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the *weight* of the body given in pounds.

Weight in Pounds	Vital Capacity in Cubic Centimetres			Weight in Pounds	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
220	5761	5260	4920	250	6316	5767	5394
221	5780	5277	4936	251	6335	5783	5410
222	5799	5294	4952	252	6353	5800	5425
223	5817	5311	4968	253	6371	5817	5441
224	5836	5329	4984	254	6389	5833	5456
225	5855	5346	5000	255	6407	5850	5472
226	5874	5363	5016	256	6425	5866	5487
227	5892	5380	5032	257	6443	5883	5503
228	5911	5397	5048	258	6461	5899	5518
229	5930	5414	5064	259	6479	5916	5533
230	5948	5431	5080	260	6497	5932	5549
231	5967	5448	5096	261	6515	5948	5564
232	5986	5465	5112	262	6533	5965	5579
233	6004	5482	5128	263	6551	5981	5595
234	6023	5499	5143	264	6569	5998	5610
235	6041	5516	5159	265	6587	6014	5625
236	6060	5533	5175	266	6605	6030	5641
237	6078	5549	5191	267	6623	6047	5656
238	6097	5566	5207	268	6641	6063	5671
239	6115	5583	5222	269	6658	6079	5686
240	6133	5600	5238	270	6676	6095	5702
241	6152	5617	5254	271	6694	6112	5717
242	6170	5633	5269	272	6712	6128	5732
243	6189	5650	5285	273	6730	6144	5747
244	6207	5667	5301	274	6747	6160	5762
245	6225	5684	5316	275	6765	6176	5777
246	6244	5700	5332	276	6783	6193	5793
247	6262	5717	5348	277	6801	6209	5808
248	6280	5734	5363	278	6818	6225	5823
249	6298	5750	5379	279	6836	6241	5838

Table XVI.—MALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the *weight* of the body given in pounds.

Weight in Pounds	Vital Capacity in Cubic Centimetres			Weight in Pounds	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
280	6854	6257	5853	290	7029	6417	6003
281	6871	6273	5868	291	7046	6433	6017
282	6889	6289	5883	292	7064	6449	6032
283	6906	6305	5898	293	7081	6465	6047
284	6924	6321	5913	294	7098	6481	6062
285	6941	6337	5928	295	7116	6497	6077
286	6959	6354	5943	296	7133	6513	6092
287	6976	6369	5958	297	7151	6529	6107
288	6994	6385	5973	298	7168	6544	6121
289	7011	6401	5988	299	7185	6560	6136

Table XVII.—MALES

Showing the normal *vital capacity* in cubic centimetres calculated from the length of the *trunk* given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Vital Capacity in Cubic Centimetres			Length in Inches and Eighths of Inches	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
24-0	1747	1595	1492	28-0	2474	2259	2113
-1	1768	1614	1510	-1	2499	2282	2134
-2	1788	1633	1527	-2	2524	2305	2156
-3	1809	1652	1545	-3	2550	2328	2177
-4	1830	1671	1563	-4	2575	2351	2199
-5	1851	1690	1581	-5	2600	2374	2221
-6	1873	1710	1599	-6	2626	2398	2243
-7	1894	1729	1618	-7	2652	2421	2265
25-0	1916	1749	1636	29-0	2678	2445	2287
-1	1937	1769	1655	-1	2704	2469	2309
-2	1959	1789	1673	-2	2730	2493	2332
-3	1981	1809	1692	-3	2757	2517	2354
-4	2003	1829	1711	-4	2783	2541	2377
-5	2025	1849	1730	-5	2810	2566	2400
-6	2048	1870	1749	-6	2837	2590	2423
-7	2070	1890	1768	-7	2864	2615	2446
26-0	2093	1911	1787	30-0	2891	2639	2469
-1	2116	1932	1807	-1	2918	2664	2492
-2	2139	1953	1826	-2	2945	2689	2515
-3	2162	1974	1846	-3	2973	2714	2539
-4	2185	1995	1866	-4	3001	2740	2563
-5	2208	2016	1886	-5	3029	2765	2586
-6	2232	2038	1906	-6	3057	2791	2610
-7	2255	2059	1926	-7	3085	2816	2634
27-0	2279	2081	1946	31-0	3113	2842	2658
-1	2303	2103	1967	-1	3141	2868	2683
-2	2327	2125	1987	-2	3170	2894	2707
-3	2351	2147	2008	-3	3199	2920	2732
-4	2375	2169	2029	-4	3227	2947	2756
-5	2400	2191	2049	-5	3256	2973	2781
-6	2424	2214	2070	-6	3285	3000	2806
-7	2449	2236	2092	-7	3315	3026	2831

Table XVII.—MALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the length of the *trunk* given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Vital Capacity in Cubic Centimetres			Length in Inches and Eighths of Inches	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
32-0	3344	3053	2856	36-0	4362	3983	3726
-1	3374	3080	2881	-1	4397	4014	3755
-2	3403	3107	2907	-2	4431	4046	3784
-3	3433	3135	2932	-3	4466	4077	3814
-4	3463	3162	2958	-4	4500	4109	3843
-5	3493	3189	2983	-5	4534	4140	3872
-6	3524	3217	3009	-6	4570	4173	3903
-7	3554	3245	3035	-7	4605	4205	3933
33-0	3585	3273	3061	37-0	4641	4237	3963
-1	3615	3301	3088	-1	4676	4270	3994
-2	3646	3329	3114	-2	4712	4302	4024
-3	3677	3357	3140	-3	4748	4335	4055
-4	3708	3386	3167	-4	4784	4367	4085
-5	3740	3414	3194	-5	4820	4400	4116
-6	3771	3443	3221	-6	4856	4433	4147
-7	3803	3472	3248	-7	4892	4467	4178
34-0	3835	3501	3275	38-0	4929	4500	4209
-1	3866	3530	3302	-1	4965	4533	4241
-2	3898	3559	3329	-2	5002	4567	4272
-3	3931	3589	3357	-3	5039	4601	4304
-4	3963	3618	3384	-4	5076	4635	4335
-5	3995	3648	3412	-5	5114	4669	4367
-6	4028	3678	3440	-6	5151	4703	4399
-7	4061	3708	3468	-7	5189	4737	4431
35-0	4094	3738	3496	39-0	5226	4771	4463
-1	4127	3768	3524	-1	5264	4806	4496
-2	4160	3798	3553	-2	5302	4841	4528
-3	4194	3829	3581	-3	5340	4876	4561
-4	4227	3859	3610	-4	5379	4911	4594
-5	4261	3890	3639	-5	5417	4946	4626
-6	4295	3921	3668	-6	5456	4981	4659
-7	4328	3952	3696	-7	5495	5017	4693

Table XVII.—MALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the length of the *trunk* given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Vital Capacity in Cubic Centimetres			Length in Inches and Eighths of Inches	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
40-0	5534	5052	4726	43-0	6515	5948	5564
-1	5573	5088	4759	-1	6558	5987	5600
-2	5612	5124	4793	-2	6601	6026	5637
-3	5651	5160	4826	-3	6644	6066	5674
-4	5691	5196	4860	-4	6687	6105	5711
-5	5731	5232	4894	-5	6731	6145	5748
-6	5771	5269	4928	-6	6774	6185	5785
-7	5811	5305	4962	-7	6818	6225	5823
41-0	5851	5342	4996	44-0	6862	6265	5860
-1	5891	5379	5031	-1	6906	6305	5897
-2	5931	5415	5065	-2	6950	6345	5935
-3	5972	5453	5100	-3	6994	6386	5973
-4	6013	5490	5135	-4	7039	6427	6011
-5	6054	5527	5170	-5	7084	6467	6050
-6	6095	5565	5205	-6	7128	6508	6088
-7	6136	5602	5240	-7	7173	6549	6126
42-0	6178	5640	5276	45-0	7219	6591	6165
-1	6219	5678	5311	-1	7264	6632	6204
-2	6261	5717	5347	-2	7310	6674	6242
-3	6303	5755	5383	-3	7355	6715	6281
-4	6345	5793	5419	-4	7401	6757	6321
-5	6387	5831	5455	-5	7447	6799	6360
-6	6430	5870	5491	-6	7493	6842	6399
-7	6472	5909	5527	-7	7540	6884	6439

Table XVIII.—MALES

Showing the normal *vital capacity* in cubic centimetres calculated from the circumference of the *chest* given in inches and eighths of inches.

Chest in Inches and Eighths of Inches	Vital Capacity in Cubic Centimetres			Chest in Inches and Eighths of Inches	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
21-0	1638	1496	1399	25-0	2312	2110	1974
-1	1658	1514	1416	-1	2334	2131	1994
-2	1677	1532	1433	-2	2357	2152	2013
-3	1697	1549	1449	-3	2381	2173	2033
-4	1717	1567	1466	-4	2404	2195	2053
-5	1736	1585	1483	-5	2427	2216	2073
-6	1756	1603	1500	-6	2450	2237	2093
-7	1776	1622	1517	-7	2474	2259	2113
22-0	1796	1640	1534	26-0	2498	2280	2133
-1	1816	1658	1551	-1	2521	2302	2153
-2	1837	1677	1569	-2	2545	2324	2174
-3	1857	1696	1586	-3	2569	2346	2194
-4	1878	1714	1604	-4	2593	2368	2215
-5	1898	1733	1621	-5	2617	2390	2235
-6	1919	1752	1639	-6	2642	2412	2256
-7	1940	1771	1657	-7	2666	2434	2277
23-0	1961	1790	1675	27-0	2691	2456	2298
-1	1982	1810	1693	-1	2715	2479	2319
-2	2003	1829	1711	-2	2740	2502	2340
-3	2024	1848	1729	-3	2765	2524	2361
-4	2046	1868	1747	-4	2790	2547	2382
-5	2067	1888	1766	-5	2815	2570	2404
-6	2089	1907	1784	-6	2840	2593	2425
-7	2111	1927	1803	-7	2865	2616	2447
24-0	2133	1947	1821	28-0	2891	2639	2469
-1	2155	1967	1840	-1	2916	2663	2490
-2	2177	1987	1859	-2	2942	2686	2512
-3	2199	2008	1878	-3	2968	2709	2534
-4	2221	2028	1897	-4	2993	2733	2556
-5	2244	2048	1916	-5	3020	2757	2579
-6	2266	2069	1935	-6	3046	2781	2601
-7	2289	2090	1955	-7	3070	2803	2622

Table XVIII.—MALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the circumference of the *chest* given in inches and eighths of inches.

Chest in Inches and Eighths of Inches	Vital Capacity in Cubic Centimetres			Chest in Inches and Eighths of Inches	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
29-0	3098	2829	2646	33-0	3997	3650	3414
-1	3124	2852	2668	-1	4028	3677	3440
-2	3151	2877	2691	-2	4057	3704	3465
-3	3178	2901	2714	-3	4088	3732	3491
-4	3204	2925	2736	-4	4118	3760	3517
-5	3231	2950	2759	-5	4148	3787	3543
-6	3258	2975	2782	-6	4179	3815	3569
-7	3285	2999	2806	-7	4209	3843	3595
30-0	3312	3024	2829	34-0	4240	3871	3621
-1	3340	3049	2852	-1	4271	3899	3647
-2	3367	3074	2875	-2	4302	3928	3674
-3	3395	3099	2899	-3	4333	3956	3700
-4	3422	3124	2922	-4	4364	3984	3727
-5	3450	3150	2946	-5	4395	4013	3754
-6	3478	3175	2970	-6	4426	4041	3780
-7	3506	3201	2994	-7	4458	4070	3807
31-0	3534	3226	3018	35-0	4490	4099	3834
-1	3562	3252	3042	-1	4521	4128	3861
-2	3590	3278	3066	-2	4553	4157	3888
-3	3618	3304	3090	-3	4585	4186	3916
-4	3647	3330	3115	-4	4617	4215	3943
-5	3676	3356	3139	-5	4649	4245	3970
-6	3704	3382	3163	-6	4681	4274	3998
-7	3733	3408	3188	-7	4714	4304	4026
32-0	3762	3435	3213	36-0	4746	4333	4053
-1	3791	3462	3238	-1	4779	4363	4081
-2	3820	3488	3263	-2	4812	4393	4109
-3	3850	3515	3288	-3	4844	4423	4137
-4	3879	3541	3313	-4	4877	4453	4165
-5	3908	3568	3338	-5	4910	4483	4193
-6	3938	3595	3363	-6	4943	4513	4222
-7	3968	3623	3388	-7	4977	4544	4250

Table XVIII.—MALES (Continued)

Showing the normal *vital capacity* in cubic centimetres calculated from the circumference of the *chest* given in inches and eighths of inches.

Chest in Inches and Eighths of Inches	Vital Capacity in Cubic Centimetres			Chest in Inches and Eighths of Inches	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
37-0	5010	4574	4278	41-0	6134	5601	5239
-1	5043	4605	4307	-1	6172	5635	5271
-2	5077	4635	4336	-2	6208	5668	5302
-3	5111	4666	4364	-3	6246	5702	5334
-4	5144	4697	4393	-4	6283	5736	5366
-5	5178	4728	4422	-5	6320	5770	5398
-6	5212	4759	4451	-6	6358	5805	5430
-7	5246	4790	4480	-7	6395	5839	5462
38-0	5280	4821	4510	42-0	6433	5874	5494
-1	5315	4852	4539	-1	6471	5908	5526
-2	5349	4884	4568	-2	6509	5943	5559
-3	5384	4915	4598	-3	6547	5978	5591
-4	5418	4947	4627	-4	6585	6012	5624
-5	5453	4979	4657	-5	6623	6047	5656
-6	5488	5011	4687	-6	6662	6083	5689
-7	5523	5043	4717	-7	6700	6117	5722
39-0	5558	5075	4747	43-0	6739	6153	5755
-1	5593	5107	4777	-1	6778	6188	5788
-2	5629	5139	4807	-2	6817	6224	5821
-3	5664	5171	4837	-3	6855	6259	5855
-4	5700	5204	4868	-4	6895	6295	5888
-5	5735	5236	4898	-5	6934	6331	5922
-6	5771	5269	4929	-6	6973	6366	5955
-7	5807	5302	4959	-7	7012	6402	5989
40-0	5843	5335	4990	44-0	7052	6438	6022
-1	5879	5368	5021	-1	7091	6474	6056
-2	5915	5401	5052	-2	7131	6510	6090
-3	5951	5434	5083	-3	7171	6547	6124
-4	5988	5467	5114	-4	7211	6583	6158
-5	6024	5500	5145	-5	7251	6620	6192
-6	6061	5534	5176	-6	7291	6656	6226
-7	6098	5567	5208	-7	7331	6693	6261

Table XIX.—FEMALES

Showing the normal *weight* of the body in pounds and decimals of pounds, and in pounds and ounces, calculated from the length of the *trunk* given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Weight in Pounds and Decimals of Pounds	Weight in Pounds and Ounces
20-0	23.96	23 15
-1	24.44	24 7
-2	24.93	24 15
-3	25.42	25 7
-4	25.92	25 15
-5	26.43	26 7
-6	26.95	26 15
-7	27.47	27 8
21-0	28.00	28 0
-1	28.53	28 9
-2	29.08	29 11
-3	29.63	29 10
-4	30.18	30 3
-5	30.75	30 12
-6	31.32	31 5
-7	31.88	31 14
22-0	32.48	32 8
-1	33.08	33 1
-2	33.68	33 11
-3	34.28	34 4
-4	34.89	34 14
-5	35.52	35 8
-6	36.15	36 2
-7	36.79	36 13
23-0	37.44	37 7
-1	38.09	38 1
-2	38.75	38 12
-3	39.42	39 7
-4	40.10	40 2
-5	40.79	40 13
-6	41.48	41 8
-7	42.18	42 3

Table XIX.—FEMALES (*Continued*)

Showing the normal *weight* of the body in pounds and decimals of pounds, and in pounds and ounces, calculated from the length of the *trunk* given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Weight in Pounds and Decimals of Pounds	Weight in Pounds and Ounces
24-0	42.89	42 14
-1	43.61	43 10
-2	44.34	44 5
-3	45.07	45 1
-4	45.81	45 13
-5	46.56	46 9
-6	47.32	47 5
-7	48.09	48 1
25-0	48.87	48 14
-1	49.65	49 10
-2	50.45	50 7
-3	51.25	51 4
-4	52.06	52 1
-5	52.88	52 14
-6	53.71	53 11
-7	54.54	54 9
26-0	55.39	55 6
-1	56.25	56 4
-2	57.11	57 2
-3	57.98	58 0
-4	58.87	58 14
-5	59.76	59 12
-6	60.66	60 11
-7	61.57	61 9
27-0	62.49	62 8
-1	63.42	63 7
-2	64.36	64 6
-3	65.30	65 5
-4	66.26	66 4
-5	67.23	67 4
-6	68.20	68 3
-7	69.19	69 3

Table XIX.—FEMALES (*Continued*)

Showing the normal *weight* of the body in pounds and decimals of pounds, and in pounds and ounces, calculated from the length of the *trunk* given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Weight in Pounds and Decimals of Pounds	Weight in Pounds and Ounces
28-0	70.19	70 3
-1	71.19	71 3
-2	72.21	72 3
-3	73.24	73 4
-4	74.27	74 4
-5	75.32	75 5
-6	76.38	76 6
-7	77.44	77 7
29-0	78.52	78 8
-1	79.60	79 10
-2	80.70	80 11
-3	81.81	81 13
-4	82.92	82 15
-5	84.05	84 1
-6	85.19	85 3
-7	86.34	86 5
30-0	87.50	87 8
-1	88.67	88 11
-2	89.84	89 13
-3	91.04	91 1
-4	92.24	92 4
-5	93.46	93 7
-6	94.68	94 11
-7	95.90	95 14
31-0	97.16	97 3
-1	98.42	98 7
-2	99.68	99 11
-3	100.96	100 15
-4	102.25	102 4
-5	103.56	103 9
-6	104.87	104 14
-7	106.20	106 3

Table XIX.—FEMALES (*Continued*)

Showing the normal *weight* of the body in pounds and decimals of pounds, and in pounds and ounces, calculated from the length of the *trunk* given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Weight in Pounds and Decimals of Pounds	Weight in Pounds and Ounces
32-0	107.53	107 8
-1	108.88	108 14
-2	110.24	110 4
-3	111.61	111 10
-4	112.99	113 0
-5	114.39	114 6
-6	115.79	115 13
-7	117.21	117 3
33-0	118.64	118 10
-1	120.09	120 1
-2	121.54	121 9
-3	123.00	123 0
-4	124.48	124 8
-5	125.97	125 4
-6	127.47	127 8
-7	128.99	129 0
34-0	130.51	130 8
-1	132.05	132 1
-2	133.60	133 10
-3	135.16	135 3
-4	136.75	136 12
-5	138.34	138 5
-6	139.93	139 15
-7	141.55	141 9
35-0	143.18	143 3
-1	144.82	144 13
-2	146.47	146 8
-3	148.14	148 2
-4	149.82	149 13
-5	151.50	151 8
-6	153.22	153 4
-7	154.93	154 15

Table XIX.—FEMALES (*Continued*)

Showing the normal *weight* of the body in pounds and decimals of pounds, and in pounds and ounces, calculated from the length of the *trunk* given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Weight in Pounds and Decimals of Pounds	Weight in Pounds and Ounces
36-0	156.66	156 11
-1	158.41	158 7
-2	160.17	160 3
-3	161.93	161 15
-4	163.72	163 12
-5	165.52	165 8
-6	167.33	167 5
-7	169.15	169 2
37-0	170.99	171 0
-1	172.85	172 14
-2	174.72	174 12
-3	176.59	176 9
-4	178.49	178 8
-5	180.40	180 6
-6	182.32	182 5
-7	184.25	184 4
38-0	186.20	186 3
-1	188.17	188 3
-2	190.14	190 2
-3	192.14	192 2
-4	194.14	194 2
-5	196.16	196 3
-6	198.20	198 3
-7	200.25	200 4
39-0	202.31	202 5
-1	204.39	204 6
-2	206.49	206 8
-3	208.59	208 10
-4	210.72	210 12
-5	212.85	212 14
-6	215.06	215 1
-7	217.18	217 3

Table XX.—FEMALES

Showing the normal *weight* of the body in pounds and decimals of pounds, and in pounds and ounces, calculated from the circumference of the *chest* given in inches and eighths of inches.

Chest in Inches and Eighths of Inches	Weight in Pounds and Decimals of Pounds	Weight in Pounds and Ounces
19-0	27.61	27 10
-1	28.26	28 4
-2	28.92	28 15
-3	29.58	29 9
-4	30.26	30 4
-5	30.95	30 15
-6	31.65	31 10
-7	32.36	32 6
20-0	33.08	33 1
-1	33.82	33 13
-2	34.56	34 9
-3	35.32	35 5
-4	36.09	36 1
-5	36.87	36 14
-6	37.66	37 11
-7	38.47	38 8
21-0	39.28	39 4
-1	40.11	40 2
-2	40.95	40 15
-3	41.81	41 13
-4	42.68	42 11
-5	43.56	43 9
-6	44.45	44 7
-7	45.36	45 4
22-0	46.27	46 4
-1	47.21	47 4
-2	48.15	48 2
-3	49.11	49 2
-4	50.08	50 1
-5	51.07	51 1
-6	52.07	52 1
-7	53.08	53 1

Table XX.—FEMALES (*Continued*)

Showing the normal *weight* of the body in pounds and decimals of pounds, and in pounds and ounces, calculated from the circumference of the *chest* given in inches and eighths of inches.

Chest in Inches and Eighths of Inches	Weight in Pounds and Decimals of Pounds	Weight in Pounds and Ounces
23-0	54.11	54 2
-1	55.15	55 2
-2	56.21	56 3
-3	57.28	57 4
-4	58.37	58 6
-5	59.47	59 8
-6	60.58	60 9
-7	61.72	61 12
24-0	62.86	62 14
-1	64.02	64 0
-2	65.20	65 3
-3	66.39	66 6
-4	67.60	67 10
-5	68.82	68 13
-6	70.05	70 1
-7	71.30	71 5
25-0	72.58	72 9
-1	73.87	73 14
-2	75.17	75 3
-3	76.49	76 8
-4	77.82	77 13
-5	79.17	79 3
-6	80.54	80 9
-7	81.93	81 15
26-0	83.32	83 5
-1	84.75	84 12
-2	86.18	86 3
-3	87.64	87 10
-4	89.11	89 2
-5	90.60	90 10
-6	92.10	92 2
-7	93.63	93 10

Table XX.—FEMALES (*Continued*)

Showing the normal *weight* of the body in pounds and decimals of pounds, and in pounds and ounces, calculated from the circumference of the *chest* given in inches and eighths of inches.

Chest in Inches and Eighths of Inches	Weight in Pounds and Decimals of Pounds	Weight in Pounds and Ounces
27-0	95.17	95 3
-1	96.73	96 12
-2	98.31	98 5
-3	99.90	99 14
-4	101.52	101 8
-5	103.16	103 3
-6	104.81	104 13
-7	106.48	106 8
28-0	108.17	108 3
-1	109.88	109 14
-2	111.61	111 10
-3	113.36	113 6
-4	115.12	115 2
-5	116.92	116 15
-6	118.72	118 12
-7	120.55	120 9
29-0	122.40	122 6
-1	124.26	124 4
-2	126.16	126 3
-3	128.06	128 1
-4	129.99	130 0
-5	131.94	131 15
-6	133.92	133 15
-7	135.91	135 15
30-0	137.91	137 15
-1	139.96	139 15
-2	142.00	142 0
-3	144.09	144 1
-4	146.18	146 3
-5	148.31	148 5
-6	150.45	150 7
-7	152.61	152 10

Table XX.—FEMALES (*Continued*)

Showing the normal *weight* of the body in pounds and decimals of pounds, and in pounds and ounces, calculated from the circumference of the *chest* given in inches and eighths of inches.

Chest in Inches and Eighths of Inches	Weight in Pounds and Decimals of Pounds	Weight in Pounds and Ounces
31-0	154.79	154 13
-1	157.01	157 0
-2	159.24	159 4
-3	161.48	161 8
-4	163.77	163 12
-5	166.07	166 1
-6	168.38	168 6
-7	170.73	170 12
32-0	173.11	173 2
-1	175.49	175 8
-2	177.91	177 15
-3	180.36	180 6
-4	182.81	182 13
-5	185.31	185 5
-6	187.82	187 13
-7	190.36	190 6
33-0	192.91	192 15
-1	195.51	195 8
-2	198.11	198 2
-3	200.74	200 12
-4	203.40	203 6
-5	206.09	206 1
-6	208.80	208 13
-7	211.54	211 9
34-0	214.30	214 5
-1	217.08	217 1
-2	219.90	219 14
-3	222.73	222 12
-4	225.61	225 10
-5	228.49	228 8
-6	231.41	231 7
-7	234.35	234 6

Table XXI.—FEMALES

Showing the normal circumference of the *chest* in inches and decimals of inches, and in inches and eighths of inches, calculated from the length of the *trunk* given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Chest in Inches and Decimals of Inches	Chest in Inches and Eighths of Inches	Length in Inches and Eighths of Inches	Chest in Inches and Decimals of Inches	Chest in Inches and Eighths of Inches
20-0	18.25	18-2	24-0	21.53	21-4
-1	.35	-3	-1	.63	-5
-2	.45	-4	-2	.73	-6
-3	.56	-4	-3	.83	-7
-4	.66	-5	-4	.93	-7
-5	.76	-6	-5	22.04	22-0
-6	.87	-7	-6	.14	-1
-7	.97	19-0	-7	.24	-2
21-0	19.07	-1	25-0	.34	-3
-1	.18	-1	-1	.44	-4
-2	.28	-2	-2	.55	-4
-3	.38	-3	-3	.65	-5
-4	.49	-4	-4	.75	-6
-5	.59	-5	-5	.85	-7
-6	.69	-6	-6	.95	23-0
-7	.79	-6	-7	23.05	-0
22-0	.90	-7	26-0	.15	-1
-1	20.00	20-0	-1	.25	-2
-2	.10	-1	-2	.35	-3
-3	.20	-2	-3	.46	-4
-4	.30	-2	-4	.56	-4
-5	.41	-3	-5	.66	-5
-6	.51	-4	-6	.76	-6
-7	.61	-5	-7	.86	-7
23-0	.72	-6	27-0	.96	24-0
-1	.82	-7	-1	24.06	-0
-2	.92	-7	-2	.16	-1
-3	21.02	21-0	-3	.26	-2
-4	.12	-1	-4	.36	-3
-5	.23	-2	-5	.46	-4
-6	.33	-3	-6	.56	-4
-7	.43	-3	-7	.66	-5

Table XXI.—FEMALES (Continued)

Showing the normal circumference of the *chest* in inches and decimals of inches, and in inches and eighths of inches, calculated from the length of the *trunk* given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Chest in Inches and Decimals of Inches	Chest in Inches and Eighths of Inches	Length in Inches and Eighths of Inches	Chest in Inches and Decimals of Inches	Chest in Inches and Eighths of Inches
28-0	24.76	24-6	32-0	27.95	28-0
-1	.86	-7	-1	28.05	-0
-2	.96	25-0	-2	.15	-1
-3	25.06	-0	-3	.25	-2
-4	.16	-1	-4	.35	-3
-5	.26	-2	-5	.45	-4
-6	.36	-3	-6	.55	-4
-7	.46	-4	-7	.65	-5
29-0	.56	-4	33-0	.74	-6
-1	.66	-5	-1	.84	-7
-2	.76	-6	-2	.94	29-0
-3	.86	-7	-3	29.04	-0
-4	.96	26-0	-4	.14	-1
-5	26.06	-0	-5	.24	-2
-6	.16	-1	-6	.34	-3
-7	.26	-2	-7	.43	-3
30-0	.36	-3	34-0	.53	-4
-1	.46	-4	-1	.63	-5
-2	.56	-4	-2	.73	-6
-3	.66	-5	-3	.83	-7
-4	.76	-6	-4	.93	-7
-5	.86	-7	-5	30.03	30-0
-6	.96	27-0	-6	.12	-1
-7	27.06	-0	-7	.22	-2
31-0	.16	-1	35.0	.32	-3
-1	.26	-2	-1	.42	-3
-2	.36	-3	-2	.52	-4
-3	.46	-4	-3	.62	-5
-4	.56	-4	-4	.71	-6
-5	.66	-5	-5	.81	-6
-6	.75	-6	-6	.91	-7
-7	.85	-7	-7	31.01	31-0

Table XXI.—FEMALES (*Continued*)

Showing the normal circumference of the *chest* in inches and decimals of inches, and in inches and eighths of inches, calculated from the length of the *trunk* given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Chest in Inches and Decimals of Inches	Chest in Inches and Eighths of Inches	Length in Inches and Eighths of Inches	Chest in Inches and Decimals of Inches	Chest in Inches and Eighths of Inches
36-0	31.11	31-1	38-0	32.67	32-5
-1	.20	-2	-1	.77	-6
-2	.30	-2	-2	.86	-7
-3	.40	-3	-3	.96	33-0
-4	.50	-4	-4	33.06	-0
-5	.60	-5	-5	.16	-1
-6	.69	-6	-6	.25	-2
-7	.79	-6	-7	.35	-3
37-0	.89	-7	39-0	.45	-4
-1	.99	32-0	-1	.55	-4
-2	32.08	-1	-2	.64	-5
-3	.18	-1	-3	.74	-6
-4	.28	-2	-4	.84	-7
-5	.38	-3	-5	.94	34-0
-6	.48	-4	-6	34.03	-0
-7	.57	-5	-7	.13	-1

Table XXII.—FEMALES

Showing the normal *vital capacity* in cubic centimetres calculated from the *weight* of the body given in pounds.

Weight in Pounds	Vital Capacity in Cubic Centimetres			Weight in Pounds	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
30	1193	1090	1019	60	1966	1795	1679
31	1222	1116	1044	61	1989	1816	1699
32	1250	1141	1068	62	2013	1838	1719
33	1278	1167	1092	63	2036	1859	1739
34	1306	1192	1115	64	2059	1880	1759
35	1334	1218	1139	65	2082	1901	1778
36	1361	1242	1162	66	2105	1922	1798
37	1388	1267	1185	67	2128	1943	1818
38	1415	1292	1208	68	2151	1964	1837
39	1442	1316	1231	69	2174	1985	1857
40	1468	1340	1254	70	2197	2005	1876
41	1494	1364	1276	71	2219	2026	1895
42	1521	1388	1299	72	2242	2047	1914
43	1547	1412	1321	73	2264	2067	1933
44	1572	1436	1343	74	2286	2087	1952
45	1598	1459	1365	75	2308	2108	1971
46	1624	1482	1387	76	2331	2128	1990
47	1649	1505	1408	77	2353	2148	2009
48	1674	1528	1430	78	2374	2168	2028
49	1699	1551	1451	79	2396	2188	2046
50	1724	1574	1472	80	2418	2208	2065
51	1749	1597	1493	81	2440	2228	2084
52	1773	1619	1514	82	2462	2247	2102
53	1798	1641	1535	83	2483	2267	2121
54	1822	1664	1556	84	2505	2287	2139
55	1846	1686	1577	85	2526	2306	2157
56	1871	1708	1597	86	2547	2326	2176
57	1895	1730	1618	87	2569	2345	2194
58	1918	1752	1638	88	2590	2365	2212
59	1942	1773	1659	89	2611	2384	2230

Table XXII.—FEMALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the *weight* of the body given in pounds.

Weight in Pounds	Vital Capacity in Cubic Centimetres			Weight in Pounds	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
90	2632	2403	2248	120	3238	2956	2765
91	2653	2422	2266	121	3257	2974	2782
92	2674	2442	2284	122	3277	2992	2798
93	2695	2461	2302	123	3296	3009	2815
94	2716	2480	2319	124	3315	3027	2831
95	2737	2499	2337	125	3335	3045	2848
96	2757	2517	2355	126	3354	3062	2864
97	2778	2536	2372	127	3373	3080	2881
98	2799	2555	2390	128	3392	3097	2897
99	2819	2574	2408	129	3411	3114	2913
100	2840	2593	2425	130	3430	3132	2929
101	2860	2611	2442	131	3449	3149	2945
102	2880	2630	2460	132	3468	3166	2962
103	2901	2648	2477	133	3487	3183	2978
104	2921	2667	2494	134	3506	3201	2994
105	2941	2685	2512	135	3525	3218	3010
106	2961	2704	2529	136	3543	3235	3026
107	2981	2722	2546	137	3562	3252	3042
108	3001	2740	2563	138	3581	3269	3058
109	3021	2759	2580	139	3599	3286	3074
110	3041	2777	2597	140	3618	3303	3090
111	3061	2795	2614	141	3637	3320	3106
112	3081	2813	2631	142	3655	3337	3122
113	3101	2831	2648	143	3674	3354	3137
114	3121	2849	2665	144	3692	3371	3153
115	3140	2867	2682	145	3711	3388	3169
116	3160	2885	2699	146	3729	3405	3185
117	3179	2903	2715	147	3747	3421	3200
118	3199	2921	2732	148	3766	3438	3216
119	3219	2939	2749	149	3784	3455	3232

Table XXII.—FEMALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the *weight* of the body given in pounds.

Weight in Pounds	Vital Capacity in Cubic Centimetres			Weight in Pounds	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
150	3802	3471	3247	180	4336	3958	3703
151	3821	3488	3263	181	4353	3974	3718
152	3839	3505	3278	182	4370	3990	3732
153	3857	3521	3294	183	4388	4006	3747
154	3875	3538	3309	184	4405	4022	3762
155	3893	3554	3325	185	4422	4037	3776
156	3911	3571	3340	186	4439	4053	3791
157	3929	3588	3356	187	4456	4069	3806
158	3947	3604	3371	188	4474	4084	3821
159	3965	3620	3386	189	4491	4102	3837
160	3983	3637	3402	190	4508	4116	3850
161	4001	3653	3417	191	4525	4131	3864
162	4019	3669	3432	192	4542	4147	3879
163	4037	3686	3447	193	4559	4162	3893
164	4055	3702	3463	194	4576	4178	3908
165	4072	3718	3478	195	4593	4193	3922
166	4090	3734	3493	196	4610	4209	3937
167	4108	3751	3508	197	4627	4224	3951
168	4126	3767	3523	198	4644	4240	3966
169	4143	3783	3538	199	4661	4255	3980
170	4161	3799	3553	200	4677	4271	3995
171	4179	3815	3568	201	4694	4286	4009
172	4196	3831	3584	202	4711	4301	4023
173	4214	3847	3599	203	4728	4317	4038
174	4231	3863	3613	204	4745	4332	4052
175	4249	3879	3628	205	4761	4347	4066
176	4266	3895	3643	206	4778	4362	4080
177	4284	3911	3658	207	4795	4378	4095
178	4301	3927	3673	208	4811	4393	4109
179	4318	3943	3688	209	4828	4408	4123

Table XXII.—FEMALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the *weight* of the body given in pounds.

Weight in Pounds	Vital Capacity in Cubic Centimetres			Weight in Pounds	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
210	4845	4423	4137	215	4927	4499	4208
211	4861	4438	4152	216	4944	4514	4222
212	4878	4453	4166	217	4960	4529	4236
213	4894	4469	4180	218	4977	4544	4250
214	4911	4484	4194	219	4993	4559	4264

Table XXIII.—FEMALES

Showing the normal *vital capacity* in cubic centimetres calculated from the length of the *trunk* given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Vital Capacity in Cubic Centimetres			Length in Inches and Eighths of Inches	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
21-0	1135	1037	970	25-0	1696	1548	1448
-1	1151	1051	983	-1	1715	1566	1465
-2	1167	1065	996	-2	1735	1584	1482
-3	1183	1080	1010	-3	1755	1602	1499
-4	1199	1094	1024	-4	1775	1620	1516
-5	1215	1109	1037	-5	1795	1639	1533
-6	1231	1124	1051	-6	1815	1657	1550
-7	1247	1139	1065	-7	1835	1676	1567
22-0	1264	1154	1079	26-0	1856	1694	1585
-1	1280	1169	1093	-1	1876	1713	1602
-2	1297	1184	1108	-2	1897	1732	1620
-3	1314	1199	1122	-3	1918	1751	1638
-4	1331	1215	1136	-4	1939	1770	1656
-5	1348	1231	1151	-5	1960	1789	1674
-6	1365	1246	1166	-6	1981	1809	1692
-7	1382	1262	1180	-7	2003	1828	1710
23-0	1400	1278	1195	27-0	2024	1848	1728
-1	1417	1294	1210	-1	2046	1868	1747
-2	1435	1310	1225	-2	2067	1888	1766
-3	1453	1326	1241	-3	2089	1907	1784
-4	1471	1343	1256	-4	2111	1928	1803
-5	1489	1359	1271	-5	2133	1948	1822
-6	1507	1376	1287	-6	2156	1968	1841
-7	1525	1393	1303	-7	2178	1989	1860
24-0	1544	1409	1318	28-0	2201	2009	1879
-1	1562	1426	1334	-1	2223	2030	1899
-2	1581	1443	1350	-2	2246	2051	1918
-3	1600	1460	1366	-3	2269	2072	1938
-4	1619	1478	1382	-4	2292	2093	1957
-5	1638	1495	1399	-5	2315	2114	1977
-6	1657	1513	1415	-6	2339	2135	1997
-7	1676	1530	1431	-7	2362	2156	2017

Table XXIII.—FEMALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the length of the *trunk* given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Vital Capacity in Cubic Centimetres			Length in Inches and Eighths of Inches	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
29-0	2386	2178	2037	33-0	3211	2932	2742
-1	2409	2200	2058	-1	3239	2958	2766
-2	2433	2222	2078	-2	3268	2983	2790
-3	2457	2243	2098	-3	3296	3009	2815
-4	2481	2265	2119	-4	3324	3035	2839
-5	2506	2288	2140	-5	3353	3061	2863
-6	2530	2310	2161	-6	3382	3087	2888
-7	2555	2332	2182	-7	3411	3114	2913
30-0	2579	2355	2203	34-0	3440	3140	2937
-1	2604	2377	2224	-1	3469	3167	2962
-2	2629	2400	2245	-2	3498	3194	2987
-3	2654	2423	2266	-3	3527	3221	3012
-4	2679	2446	2288	-4	3557	3248	3038
-5	2704	2469	2310	-5	3587	3275	3063
-6	2730	2492	2331	-6	3617	3302	3089
-7	2755	2516	2353	-7	3647	3329	3114
31-0	2781	2539	2375	35-0	3677	3357	3140
-1	2807	2563	2397	-1	3707	3385	3166
-2	2833	2587	2419	-2	3737	3412	3192
-3	2859	2610	2442	-3	3768	3440	3218
-4	2885	2634	2464	-4	3799	3468	3244
-5	2912	2659	2487	-5	3829	3496	3270
-6	2938	2683	2509	-6	3861	3525	3297
-7	2965	2707	2532	-7	3892	3553	3323
32-0	2992	2732	2555	36-0	3923	3582	3350
-1	3019	2756	2578	-1	3954	3610	3377
-2	3046	2781	2601	-2	3986	3639	3404
-3	3073	2806	2624	-3	4017	3668	3431
-4	3100	2831	2648	-4	4049	3697	3458
-5	3128	2856	2671	-5	4081	3726	3485
-6	3156	2881	2695	-6	4114	3756	3513
-7	3184	2907	2719	-7	4146	3785	3540

Table XXIII.—FEMALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the length of the *trunk* given in inches and eighths of inches.

Length in Inches and Eighths of Inches	Vital Capacity in Cubic Centimetres			Length in Inches and Eighths of Inches	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
37-0	4178	3819	3568	39-0	4716	4306	4027
-1	4211	3844	3596	-1	4751	4337	4057
-2	4243	3874	3624	-2	4786	4369	4087
-3	4276	3904	3652	-3	4821	4401	4117
-4	4309	3934	3680	-4	4856	4434	4147
-5	4342	3965	3708	-5	4892	4466	4177
-6	4376	3995	3737	-6	4927	4499	4208
-7	4409	4025	3765	-7	4963	4531	4238
38-0	4442	4056	3794	40-0	4999	4564	4269
-1	4476	4087	3823				
-2	4510	4117	3851				
-3	4544	4149	3881				
-4	4578	4180	3910				
-5	4612	4211	3939				
-6	4647	4242	3968				
-7	4681	4274	3998				

Table XXIV.—FEMALES

Showing the normal *vital capacity* in cubic centimetres calculated from the circumference of the *chest* given in inches and eighths of inches.

Chest in Inches and Eighths of Inches	Vital Capacity in Cubic Centimetres			Chest in Inches and Eighths of Inches	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
19-0	1124	1027	960	23-0	1825	1666	1559
-1	1143	1044	976	-1	1850	1689	1580
-2	1162	1061	993	-2	1876	1712	1602
-3	1181	1079	1009	-3	1901	1736	1624
-4	1201	1096	1025	-4	1927	1760	1646
-5	1220	1114	1042	-5	1953	1783	1668
-6	1240	1132	1059	-6	1980	1807	1691
-7	1260	1151	1076	-7	2006	1832	1713
20-0	1280	1169	1094	24-0	2033	1856	1736
-1	1301	1188	1111	-1	2060	1881	1759
-2	1321	1206	1129	-2	2087	1905	1782
-3	1342	1225	1146	-3	2114	1930	1806
-4	1363	1245	1164	-4	2142	1956	1829
-5	1384	1264	1182	-5	2170	1981	1853
-6	1406	1283	1201	-6	2198	2007	1877
-7	1427	1303	1219	-7	2226	2032	1901
21-0	1449	1323	1237	25-0	2254	2058	1925
-1	1471	1343	1256	-1	2283	2085	1950
-2	1493	1363	1275	-2	2312	2111	1974
-3	1516	1384	1294	-3	2341	2138	1999
-4	1538	1404	1314	-4	2371	2164	2024
-5	1561	1425	1333	-5	2400	2191	2050
-6	1584	1446	1353	-6	2430	2219	2075
-7	1607	1467	1372	-7	2460	2246	2101
22-0	1630	1489	1392	26-0	2490	2274	2127
-1	1654	1510	1412	-1	2521	2301	2153
-2	1678	1532	1433	-2	2551	2329	2179
-3	1702	1554	1453	-3	2582	2358	2205
-4	1726	1576	1474	-4	2613	2386	2232
-5	1750	1598	1495	-5	2645	2415	2259
-6	1775	1621	1516	-6	2676	2443	2286
-7	1800	1643	1537	-7	2708	2473	2313

Table XXIV.—FEMALES (*Continued*)

Showing the normal *vital capacity* in cubic centimetres calculated from the circumference of the *chest* given in inches and eighths of inches.

Chest in Inches and Eighths of Inches	Vital Capacity in Cubic Centimetres			Chest in Inches and Eighths of Inches	Vital Capacity in Cubic Centimetres		
	CLASS A	CLASS B	CLASS C		CLASS A	CLASS B	CLASS C
27-0	2740	2502	2340	31-0	3889	3551	3322
-1	2772	2531	2368	-1	3929	3588	3356
-2	2805	2561	2396	-2	3969	3624	3390
-3	2838	2591	2423	-3	4010	3661	3424
-4	2871	2621	2452	-4	4050	3698	3459
-5	2904	2651	2480	-5	4091	3735	3494
-6	2937	2682	2508	-6	4132	3773	3529
-7	2971	2712	2537	-7	4174	3811	3564
28-0	3005	2743	2566	32-0	4215	3849	3600
-1	3039	2775	2595	-1	4257	3887	3636
-2	3073	2806	2625	-2	4299	3925	3672
-3	3108	2838	2654	-3	4342	3964	3708
-4	3143	2869	2684	-4	4384	4003	3744
-5	3178	2901	2714	-5	4427	4042	3781
-6	3213	2934	2744	-6	4470	4081	3818
-7	3249	2966	2774	-7	4514	4121	3855
29-0	3284	2999	2805	33-0	4557	4161	3892
-1	3320	3031	2836	-1	4601	4201	3930
-2	3357	3065	2867	-2	4645	4241	3967
-3	3393	3098	2898	-3	4690	4282	4005
-4	3430	3131	2929	-4	4734	4322	4043
-5	3467	3165	2961	-5	4779	4364	4082
-6	3504	3199	2993	-6	4825	4405	4120
-7	3542	3233	3024	-7	4870	4446	4159
30-0	3579	3268	3057	34-0	4916	4488	4198
-1	3617	3302	3089	-1	4962	4530	4237
-2	3655	3337	3122	-2	5008	4572	4277
-3	3694	3372	3154	-3	5054	4615	4316
-4	3732	3408	3187	-4	5101	4657	4356
-5	3771	3443	3221	-5	5148	4700	4396
-6	3811	3479	3254	-6	5195	4743	4437
-7	3850	3515	3288	-7	5243	4787	4477

EXAMPLES

METRIC SYSTEM

Example 1

FEMALE, AGE 21 YEARS

<i>Observations</i> {	Weight of body	= 62.0 kilograms
	Length of trunk	= 88.8 centimetres
	Circumference of chest	= 75.0 centimetres
	Vital capacity	= 3630 cubic centimetres

CALCULATION

Weight derived from length of trunk (88.8 cm.) = 64.71 kilos (from Table VII.).

Weight derived from circumference of chest (75.0 cm.) = 59.16 kilos (from Table VIII.).

Averaging $\frac{64.71 + 59.16}{2} = 61.9$ kilos, which is the normal

weight corresponding to the observed length of trunk and circumference of chest.

Subtracting the calculated weight from the observed weight,
 $62.0 - 61.9 = +0.1$ kilos.

$\frac{+0.1 \times 100}{61.9} = +0.2\%$ (or roughly 0%).

Therefore the person weighs exactly what she should weigh according to the Tables.

Since by the above calculation the person's weight is found to be normal, the vital capacity as calculated from the observed weight will be correct; therefore

Vital capacity derived from weight of the body (62.0 kilos) = 3556 c.c. (from Table X., Class A).

Subtracting the calculated from the observed vital capacity,

$3630 - 3556 = +74$ c.c.

$\frac{+74 \times 100}{3556} = +2.08\%$ (or roughly +2%).

Therefore the person has 2% greater vital capacity than she should have according to the Tables for Class A, calculated from the weight of the body.

To check the vital capacity as calculated from the weight of the body, proceed as follows:—

Vital capacity derived from length of trunk (88.8 cm.) = 3667 c.c. (from Table XI., Class A).

Vital capacity derived from circumference of chest (75.0 cm.) = 3438 c.c. (from Table XII., Class A).

Averaging $\frac{3667 + 3438}{2} = 3553$ c.c., which is the normal vital capacity for Class A corresponding to the length of trunk and circumference of chest.

Subtracting the calculated from the observed vital capacity, 3630 - 3553 = +77 c.c.

$$\frac{+77 \times 100}{3553} = +2.17\% \text{ (or roughly } +2\%).$$

Therefore the person has 2% greater vital capacity than she should have according to the Tables for Class A, calculated from length of trunk and circumference of chest.

Example 2

MALE, AGE 13 YEARS

<i>Observations</i>	Weight of body	= 40.5 kilograms
	Length of trunk	= 77.1 centimetres
	Circumference of chest	= 72.0 centimetres
	Vital capacity	= 2880 cubic centimetres

CALCULATION

Weight from length of trunk = 39.73 kilos.

Weight from circumference of chest = 39.61 kilos.

Averaging $39.73 + 39.61 \div 2 = 39.7$ kilos = weight calculated.

Subtracting calculated from observed weight,

$$40.5 - 39.7 = +0.8 \text{ kilos.}$$

$$+0.8 \times 100 \div 39.7 = +2.01\%.$$

Therefore the person is 2.01% too heavy.

Vital capacity from weight = 3010 c.c. (Class A) = (vital capacity calculated from weight).

Subtracting calculated from observed vital capacity

$$2880 - 3010 = -130 \text{ c.c.}$$

$$-130 \times 100 \div 3010 = -4.32\%$$

Therefore the person has 4.32% too little vital capacity for Class A by weight.

Vital capacity from length of trunk = 2969 c.c. (Class A).

Vital capacity from circumference of chest = 2962 c.c.

(Class A).

Averaging $2969 + 2962 \div 2 = 2966$ c.c. (Class A) = (vital capacity calculated from length of trunk and circumference of chest).

Subtracting calculated from observed vital capacity,

$$2880 - 2966 = -86 \text{ c.c.}$$

$$-86 \times 100 \div 2966 = -2.9\%$$

Therefore the person has 2.9% too little vital capacity for Class A by length of trunk and circumference of chest.

Example 3

FEMALE, AGE 20 YEARS

<i>Observations</i>	{	Weight of body	= 52.5 kilograms
		Length of trunk	= 83.8 centimetres
		Circumference of chest	= 72.5 centimetres
		Vital capacity	= 3100 cubic centimetres

CALCULATION

Weight from length of trunk = 53.77 kilos.

Weight from circumference of chest = 52.51 kilos.

Averaging $53.77 + 52.51 = 106.28$.

$106.28 \div 2 = 53.1$ kilos = weight calculated.

Subtracting calculated from observed weight,

$$52.5 - 53.1 = -0.6 \text{ kilos.}$$

$$-0.6 \times 100 \div 53.1 = -1.13\%$$

Therefore the person is 1.13% too light.

Vital capacity from weight = 3155 c.c. (Class A) = (vital capacity calculated from weight).

Subtracting calculated from observed vital capacity,

$$3100 - 3155 = -55 \text{ c.c.}$$

$$-55 \times 100 \div 3155 = -1.74\%.$$

Therefore the person has 1.74% too little vital capacity for Class A by weight.

Vital capacity from length of trunk = 3210 c.c.

Vital capacity from circumference of chest = 3155 c.c.

Averaging $3210 + 3155 \div 2 = 3183$ c.c. = (vital capacity calculated from length of trunk and circumference of chest).

Subtracting calculated from observed vital capacity,

$$3100 - 3183 = -83 \text{ c.c.}$$

$$-83 \times 100 \div 3183 = -2.61\%$$

Therefore the person has 2.61% too little vital capacity for Class A by length of trunk and circumference of chest.

Example 4

MALE, AGE 9 YEARS

<i>Observations</i>	{	Weight of body	= 32.2 kilograms
		Length of trunk	= 72.2 centimetres
		Circumference of chest	= 67.0 centimetres
		Vital capacity	= 2390 cubic centimetres

CALCULATION

Weight from length of trunk = 32.34 kilos.

Weight from circumference of chest = 32.52 kilos.

Averaging $32.34 + 32.52 \div 2 = 32.4$ kilos = weight calculated.

Subtracting calculated from observed weight,

$$32.2 - 32.4 = -0.2 \text{ kilos.}$$

$$-0.2 \times 100 \div 32.4 = -0.62\%.$$

Therefore the person is 0.62% too light.

Vital capacity from weight = 2330 c.c. (Class B) = (vital capacity calculated from weight).

Subtracting calculated from observed vital capacity,

$$2390 - 2330 = +60 \text{ c.c.}$$

$$+60 \times 100 \div 2330 = +2.58\%.$$

Therefore the person has 2.58% too great vital capacity for Class B by weight.

Vital capacity from length of trunk = 2336 c.c. (Class B).

Vital capacity from circumference of chest = 2346 c.c. (Class B).

Averaging $2336 + 2346 \div 2 = 2341$ c.c. (Class B) = (vital capacity calculated from length of trunk and circumference of chest).

Subtracting calculated from observed vital capacity,

$$2390 - 2341 = +49 \text{ c.c.}$$

$$+49 \times 100 \div 2341 = +2.09\%.$$

Therefore the person has 2.09% too great vital capacity for Class B by length of trunk and circumference of chest.

Example 5

MALE, AGE 13 YEARS

<i>Observations</i>	{	Weight of body	= 32.5 kilograms
		Length of trunk	= 72.6 centimetres
		Circumference of chest	= 67.5 centimetres
		Vital capacity	= 2140 cubic centimetres

CALCULATION

Weight from length of trunk = 32.91 kilos.

Weight from circumference of chest = 33.20 kilos.

Averaging $32.91 + 33.20 \div 2 = 33.1$ kilos = weight calculated.

Subtracting calculated from observed weight,

$$32.5 - 33.1 = -0.6 \text{ kilos.}$$

$$-0.6 \times 100 \div 33.1 = -1.81\%.$$

Therefore the person is 1.81% too light.

Vital capacity from weight = 2194 c.c. (Class C) = (vital capacity calculated from weight).

Subtracting calculated from observed vital capacity,

$$2140 - 2194 = -54 \text{ c.c.}$$

$$-54 \times 100 \div 2194 = -2.46\%.$$

Therefore the person has 2.46% too little vital capacity for Class C by weight.

Vital capacity from length of trunk = 2213 c.c. (Class C).

Vital capacity from circumference of chest = 2227 c.c. (Class C).

Averaging $2213 + 2227 \div 2 = 2220$ c.c. (Class C) = (vital capacity calculated from length of trunk and circumference of chest).

Subtracting calculated from observed vital capacity,

$$2140 - 2220 = -80 \text{ c.c.}$$

$$-80 \times 100 \div 2220 = -3.6\%.$$

Therefore the person has 3.6% too little vital capacity for Class C by length of trunk and circumference of chest.

Example 6

MALE, AGE 8 YEARS

<i>Observations</i>	{	Weight of body	= 25.5 kilograms
		Length of trunk	= 65.4 centimetres
		Circumference of chest	= 62.0 centimetres
		Vital capacity	= 1960 cubic centimetres

CALCULATION

Weight from length of trunk = 23.72 kilos.

Weight from circumference of chest = 26.29 kilos.

Averaging $23.72 + 26.29 \div 2 = 25.0$ kilos = weight calculated.

Subtracting calculated from observed weight,

$$25.5 - 25.0 = +0.5 \text{ kilos.}$$

$$+0.5 \times 100 \div 25.0 = +2\%.$$

Therefore the person is 2% too heavy.

Vital capacity from weight = 1969 c.c. (Class B) = (vital capacity calculated from weight).

Subtracting calculated from observed vital capacity,

$$1960 - 1969 = -9 \text{ c.c.}$$

$$-9 \times 100 \div 1969 = -0.46\%.$$

Therefore the person has 0.46% too little vital capacity for Class B by weight.

Vital capacity from length of trunk = 1869 c.c. (Class B).

Vital capacity from circumference of chest = 2013 c.c. (Class B).

Averaging $1869 + 2013 \div 2 = 1941$ c.c. (Class B) = (vital capacity calculated from length of trunk and circumference of chest).

Subtracting calculated from observed vital capacity,

$1960 - 1941 = +19$ c.c.

$+19 \times 100 \div 1941 = +0.98\%$.

Therefore the person has 0.98% too great vital capacity for Class B by length of trunk and circumference of chest.

Example 7

FEMALE, AGE 9 YEARS

<i>Observations</i>	Weight of body	= 28.6 kilograms
	Length of trunk	= 65.7 centimetres
	Circumference of chest	= 59.0 centimetres

CALCULATION

Weight from length of trunk = 24.78 kilos.

Weight from circumference of chest = 25.41 kilos.

Averaging $24.78 + 25.41 \div 2 = 25.1$ kilos = weight calculated.

Subtracting calculated from observed weight,

$28.6 - 25.1 = +3.5$ kilos.

$+3.5 \times 100 \div 25.1 = +13.94\%$.

Therefore the person is 13.94% too heavy.

Example 8

MALE, AGE 20 YEARS

<i>Observations</i>	Weight of body	= 59.8 kilograms
	Length of trunk	= 90.2 centimetres
	Circumference of chest	= 86.0 centimetres
	Vital capacity	= 4700 cubic centimetres

CALCULATION

Weight from length of trunk = 64.98 kilos.

Weight from circumference of chest = 64.45 kilos.

Averaging $64.98 + 64.45 \div 2 = 64.7$ kilos = weight calculated.

Subtracting calculated from observed weight,

$$59.8 - 64.7 = -4.9 \text{ kilos.}$$

$$-4.9 \times 100 \div 64.7 = -7.57\%.$$

Therefore the person is 7.57% too light.

The vital capacity calculated from weight will obviously be too small on account of the person being under weight.

Vital capacity from length of trunk = 4230 c.c. (Class A).

Vital capacity from circumference of chest = 4205 c.c. (Class A).

Averaging $4230 + 4205 \div 2 = 4218$ c.c. (Class A) = (vital capacity calculated from length of trunk and circumference of chest).

Subtracting calculated from observed vital capacity,

$$4700 - 4218 = +482 \text{ c.c.}$$

$$+482 \times 100 \div 4218 = +11.43\%$$

Therefore the person has 11.43% too great vital capacity for Class A by length of trunk and circumference of chest.

Example 9

MALE, AGE 25 YEARS

<i>Observations</i>	{	Weight of body	= 69.0 kilograms
		Length of trunk	= 88.7 centimetres
		Circumference of chest	= 85.0 centimetres
		Vital capacity	= 4200 cubic centimetres

CALCULATION

Weight from length of trunk = 61.65 kilos.

Weight from circumference of chest = 62.42 kilos.

Averaging $61.65 + 62.42 \div 2 = 62.0$ kilos = weight calculated.

Subtracting calculated from observed weight,

$$69.0 - 62.0 = +7 \text{ kilos.}$$

$$+7 \times 100 \div 62.0 = +11.29\%.$$

Therefore the person is 11.29% too heavy.

The vital capacity calculated from weight will obviously be too large on account of the person being above weight.

Vital capacity from length of trunk = 4073 c.c. (Class A).

Vital capacity from circumference of chest = 4109 c.c. (Class A).

Averaging $4073 + 4109 \div 2 = 4091$ c.c. (Class A) = (vital capacity calculated from length of trunk and circumference of chest).

Subtracting calculated from observed vital capacity,

$$4200 - 4091 = +109 \text{ c.c.}$$

$$+109 \times 100 \div 4091 = +2.66\%.$$

Therefore the person has 2.66% too great vital capacity for Class A by length of trunk and circumference of chest.

Example 10

FEMALE, AGE 20 YEARS

<i>Observations</i>	Weight of body	= 51.7 kilograms
	Length of trunk	= 86.9 centimetres
	Circumference of chest	= 68.0 centimetres

CALCULATION

Weight from length of trunk = 60.4 kilos.

Weight from circumference of chest = 41.9 kilos.

Averaging $60.4 + 41.9 \div 2 = 51.2$ kilos = weight calculated.

Subtracting calculated from observed weight,

$$51.7 - 51.2 = +0.5 \text{ kilos.}$$

$$+0.5 \times 100 \div 51.2 = +0.98\%.$$

Therefore the person weighs about 1% more than she should according to the Tables.

AMERICAN STANDARD SYSTEM

Example 11

FEMALE, AGE 21 YEARS

<i>Observations</i>	Weight of body	= 136 lb. 11 oz.
	Length of trunk	= 35 inches
	Circumference of chest	= 29½ inches
	Vital capacity	= 3630 c.c.

CALCULATION

Weight derived from length of trunk (35 in.) = 143.18 lb.
(from Table XIX.).

Weight derived from circumference of chest (29½ in.) =
129.99 lb. (from Table XX.).

Averaging $\frac{143.18 + 129.99}{2} = 136.09$ lb., which is the normal weight corresponding to the observed length of trunk and circumference of chest.

Subtracting the calculated weight from the observed weight,

$$136.69 - 136.09 = +0.60 \text{ lb.}$$

$$+0.60 \times 100 \div 136.09 = +0.44\%.$$

Therefore the person weighs 0.44% more than she should weigh according to the Tables.

Since by the above calculation the person's weight is found to be practically normal, the vital capacity as calculated from the observed weight will be approximately correct; therefore

Vital capacity derived from weight of the body (136 lb.

11 oz.) = 3556 c.c. (from Table XXII., Class A).

Subtracting the calculated from the observed vital capacity,

$$3630 - 3556 = +74 \text{ c.c.}$$

$$+74 \times 100 \div 3556 = +2.08\% \text{ (or roughly } +2\%).$$

Therefore the person has 2% greater vital capacity than she should have according to the Tables for Class A, calculated from the weight of the body.

To check the vital capacity as calculated from the weight of the body, proceed as follows:—

Vital capacity derived from length of trunk (35 in.) = 3677 c.c. (from Table XXIII, Class A).

Vital capacity derived from circumference of chest $29\frac{1}{2}$ in.) = 3430 c.c. (from Table XXIV, Class A).

Averaging $3677 + 3430 \div 2 = 3554$ c.c., which is the normal vital capacity for Class A corresponding to the length of trunk and circumference of chest.

Subtracting the calculated from the observed vital capacity, $3630 - 3554 = +76$ c.c.

$+76 \times 100 \div 3554 = +2.14\%$ (or roughly $+2\%$).

Therefore the person has 2% greater vital capacity than she should have according to the Tables for Class A, calculated from length of trunk and circumference of chest.

Example 12

MALE, AGE 13 YEARS

<i>Observations</i>	{	Weight of body	= 89 lb. 5 oz.
		Length of trunk	= $30\frac{3}{8}$ inches
		Circumference of chest	= $28\frac{3}{8}$ inches
		Vital capacity	= 2880 c.c.

CALCULATION

Weight from length of trunk = 87.79 lb.

Weight from circumference of chest = 87.57 lb.

Averaging $87.79 + 87.57 \div 2 = 87.68$ lb. = weight calculated.

Subtracting calculated from observed weight,

$89.31 - 87.68 = +1.63$ lb.

$+1.63 \times 100 \div 87.68 = +1.86\%$.

Therefore the person is 1.86% too heavy.

Vital capacity from weight = 3011 c.c. (Class A) = (vital capacity calculated from weight).

Subtracting calculated from observed vital capacity,

$2880 - 3011 = -131$ c.c.

$-131 \times 100 \div 3011 = -4.35\%$.

Therefore the person has 4.35% too little vital capacity for Class A by weight.

Vital capacity from length of trunk = 2973 c.c. (Class A).

Vital capacity from circumference of chest = 2968 c.c. (Class A).

Averaging $2973 + 2968 \div 2 = 2971$ c.c. (Class A) = (vital capacity calculated from length of trunk and circumference of chest).

Subtracting calculated from observed vital capacity,

$$2880 - 2971 = -91 \text{ c.c.}$$

$$-91 \times 100 \div 2971 = -3.06\%.$$

Therefore the person has 3.06% too little vital capacity for Class A by length of trunk and circumference of chest.

Example 13

FEMALE, AGE 20 YEARS

<i>Observations</i>	Weight of body	= 115 lb. 12 oz.
	Length of trunk	= 33 inches
	Circumference of chest	= $28\frac{1}{2}$ inches
	Vital capacity	= 3100 c.c.

CALCULATION

Weight from length of trunk = 118.64 lb.

Weight from circumference of chest = 115.12 lb.

Averaging $118.64 + 115.12 \div 2 = 116.88$ lb. = weight calculated.

Subtracting calculated from observed weight,

$$115.75 - 116.88 = -1.13 \text{ lb.}$$

$$-1.13 \times 100 \div 116.88 = -0.97\%.$$

Therefore the person is 0.97% too light.

Vital capacity from weight = 3155 c.c. (Class A) = (vital capacity calculated from weight).

Subtracting calculated from observed vital capacity,

$$3100 - 3155 = -55 \text{ c.c.}$$

$$-55 \times 100 \div 3155 = -1.74\%.$$

Therefore the person has 1.74% too little vital capacity for Class A by weight.

Vital capacity from length of trunk = 3211 c.c.

Vital capacity from circumference of chest = 3143 c.c.

Averaging $3211 + 3143 \div 2 = 3177$ c.c. = (vital capacity calculated from length of trunk and circumference of chest).

Subtracting calculated from observed vital capacity,

$$3100 - 3177 = -77 \text{ c.c.}$$

$$-77 \times 100 \div 3177 = -2.42\%.$$

Therefore the person has 2.42% too little vital capacity for Class A by length of trunk and circumference of chest.

Example 14

MALE, AGE 9 YEARS

<i>Observations</i>	{	Weight of body	= 71 lb.
		Length of trunk	= $28\frac{3}{8}$ inches.
		Circumference fo chest	= $26\frac{3}{8}$ inches
		Vital capacity	= 2390 c.c.

CALCULATION

Weight from length of trunk = 70.91 lb.

Weight from circumference of chest = 71.67 lb.

Averaging $70.91 + 71.67 \div 2 = 71.29$ lb. = weight calculated.

Subtracting calculated from observed weight,

$$71.00 - 71.29 = -0.29 \text{ lb.}$$

$$-0.29 \times 100 \div 71.29 = -0.41\%.$$

Therefore the person is 0.41% too light.

Vital capacity from weight = 2330 c.c. (Class B) = (vital capacity calculated from weight).

Subtracting calculated from observed vital capacity,

$$2390 - 2330 = +60 \text{ c.c.}$$

$$+60 \times 100 \div 2330 = +2.58\%.$$

Therefore the person has 2.58% too great vital capacity for Class B by weight.

Vital capacity from length of trunk = 2328 c.c. (Class B).

Vital capacity from circumference of chest = 2346 c.c.
(Class B).

Averaging $2328 + 2346 \div 2 = 2337$ c.c. (Class B) = (vital capacity calculated from length of trunk and circumference of chest).

Subtracting calculated from observed vital capacity,

$$2390 - 2337 = +53 \text{ c.c.}$$

$$+53 \times 100 \div 2337 = +2.27\%.$$

Therefore the person has 2.27% too great vital capacity for Class B by length of trunk and circumference of chest.

Example 15

MALE, AGE 13 YEARS

<i>Observations</i>	{	Weight of body	= 71 lb. 10 oz.
		Length of trunk	= $28\frac{5}{8}$ inches
		Circumference of chest	= $26\frac{5}{8}$ inches
		Vital capacity	= 2140 c.c.

CALCULATION

Weight from length of trunk = 72.88 lb.

Weight from circumference of chest = 73.55 lb.

Averaging $72.88 + 73.55 \div 2 = 73.22$ lb. = weight calculated.

Subtracting calculated from observed weight,

$$71.63 - 73.22 = -1.59 \text{ lb.}$$

$$-1.59 \times 100 \div 73.22 = -2.17\%.$$

Therefore the person is 2.17% too light.

Vital capacity from weight = 2193 c.c. (Class C) = (vital capacity calculated from weight).

Subtracting calculated from observed vital capacity,

$$2140 - 2193 = -53 \text{ c.c.}$$

$$-53 \times 100 \div 2193 = 2.42\%.$$

Therefore the person has 2.42% too little vital capacity for Class C by weight.

Vital capacity from length of trunk = 2221 c.c. (Class C.)

Vital capacity from circumference of chest = 2235 c.c.
(Class C).

Averaging $2221 + 2235 \div 2 = 2228$ c.c. (Class C) = (vital capacity calculated from length of trunk and circumference of chest).

Subtracting calculated from observed vital capacity,

$$2140 - 2228 = -88 \text{ c.c.}$$

$$-88 \times 100 \div 2228 = -3.95\%.$$

Therefore the person has 3.95% too little vital capacity for Class C by length of trunk and circumference of chest.

Example 16

MALE, AGE 8 YEARS

<i>Observations</i>	{	Weight of body	= 56 lb. 4 oz.
		Length of trunk	= $25\frac{3}{4}$ inches
		Circumference of chest	= $24\frac{3}{8}$ inches
		Vital capacity	= 1960 c.c.

CALCULATION

Weight from length of trunk = 52.30 lb.

Weight from circumference of chest = 57.74 lb.

Averaging $52.30 + 57.74 \div 2 = 55.02$ lb. = weight calculated.

Subtracting calculated from observed weight,

$$56.25 - 55.02 = +1.23 \text{ lb.}$$

$$+1.23 \times 100 \div 55.02 = +2.24\%.$$

Therefore the person is 2.24% too heavy.

Vital capacity from weight = 1971 c.c. (Class B) = (vital capacity calculated from weight).

Subtracting calculated from observed vital capacity,

$$1960 - 1971 = -11 \text{ c.c.}$$

$$-11 \times 100 \div 1971 = -0.56\%.$$

Therefore the person has 0.56% too little vital capacity for Class B by weight.

Vital capacity from length of trunk = 1870 c.c. (Class B).

EXAMPLES

Vital capacity from circumference of chest = 2008 c.c.
(Class B).

Averaging $1870 + 2008 \div 2 = 1939$ c.c. (Class B) = (vital capacity calculated from length of trunk and circumference of chest).

Subtracting calculated from observed vital capacity,

$$1960 - 1939 = +21 \text{ c.c.}$$

$$+21 \times 100 \div 1939 = +1.08\%.$$

Therefore the person has 1.08% too great vital capacity for Class B by length of trunk and circumference of chest.

Example 17

FEMALE, AGE 9 YEARS

<i>Observations</i>	{	Weight of body	= 63 lb. 1 oz.
		Length of trunk	= $25\frac{7}{8}$ inches
		Circumference of chest	= $23\frac{1}{4}$ inches

CALCULATION

Weight from length of trunk = 54.54 lb.

Weight from circumference of chest = 56.21 lb.

Averaging $54.54 + 56.21 \div 2 = 55.38$ lb. = weight calculated.

Subtracting calculated from observed weight,

$$63.06 - 55.38 = +7.68 \text{ lb.}$$

$$+7.68 \times 100 \div 55.38 = +13.87\%.$$

Therefore the person is 13.87% too heavy.

Example 18

MALE, AGE 20 YEARS

<i>Observations</i>	{	Weight of body	= 131 lb. 13 oz.
		Length of trunk	= $35\frac{1}{2}$ inches
		Circumference of chest	= $33\frac{7}{8}$ inches
		Vital capacity	= 4700 c.c.

CALCULATION

Weight from length of trunk = 143.11 lb.

Weight from circumference of chest = 142.27 lb.

Averaging $143.11 + 142.27 \div 2 = 142.69$ lb. = weight calculated.

Subtracting calculated from observed weight,

$$131.81 - 142.27 = -10.88 \text{ lb.}$$

$$-10.88 \times 100 \div 142.69 = -7.62\%.$$

Therefore the person is 7.62% too light.

The vital capacity calculated from weight will obviously be too small on account of the person being under weight.

Vital capacity from length of trunk = 4227 c.c. (Class A).

Vital capacity from circumference of chest = 4209 c.c. (Class A).

Averaging $4227 + 4209 \div 2 = 4218$ c.c. (Class A) = (vital capacity calculated from length of trunk and circumference of chest).

Subtracting calculated from observed vital capacity,

$$4700 - 4218 = +482 \text{ c.c.}$$

$$+482 \times 100 \div 4218 = +11.43\%.$$

Therefore the person has 11.43% too great vital capacity for Class A by length of trunk and circumference of chest.

Example 19

MALE, AGE 25 YEARS

<i>Observations</i>	{	Weight of body	= 152 lb. 2 oz.
		Length of trunk	= $34\frac{7}{8}$ inches
		Circumference of chest	= $33\frac{1}{2}$ inches
		Vital capacity	= 4200 c.c.

CALCULATION

Weight from length of trunk = 135.35 lb.

Weight from circumference of chest = 137.99 lb.

Averaging $135.35 + 137.99 \div 2 = 136.67$ lb. = weight calculated.

Subtracting calculated from observed weight,

$$152.13 - 136.67 = +15.46 \text{ lb.}$$

$$+15.46 \times 100 \div 136.67 = +11.31\%.$$

Therefore the person is 11.31% too heavy.

The vital capacity calculated from the weight will obviously be too large on account of the person being above weight.

Vital capacity from length of trunk = 4061 c.c. (Class A).

Vital capacity from circumference of chest = 4118 c.c. (Class A).

Averaging $4061 + 4118 \div 2 = 4090$ c.c. (Class A) = (vital capacity calculated from length of trunk and circumference of chest).

Subtracting calculated from observed vital capacity,

$$4200 - 4090 = +110 \text{ c.c.}$$

$$+110 \times 100 \div 4090 = +2.69\%.$$

Therefore the person has 2.69% too great vital capacity for Class A by length of trunk and circumference of chest.

Example 20

FEMALE, AGE 20 YEARS

<i>Observations</i>	{	Weight of body	= 114 lb.
		Length of trunk	= $34\frac{1}{4}$ inches
		Circumference of chest	= $26\frac{3}{4}$ inches.

CALCULATION

Weight from length of trunk = 133.60 lb.

Weight from circumference of chest = 92.10 lb.

Averaging $133.60 + 92.10 \div 2 = 112.85$ lb. = weight calculated.

Subtracting calculated from observed weight,

$$114.00 - 112.85 = +1.15 \text{ lb.}$$

$$+1.15 \times 100 \div 112.85 = +1.02\%.$$

Therefore the person weighs about 1% more than she should according to the Tables.

REDUCTION TABLES

Cubic Inches to Cubic Centimetres

Cubic Inches		Cubic Centimeters
1	=	16.3872
2	=	32.7743
3	=	49.1615
4	=	65.5486
5	=	81.9358
6	=	98.3230
7	=	114.7101
8	=	131.0973
9	=	147.4845

Inches to Centimetres

Inches		Centimeters
1	=	2.54
2	=	5.08
3	=	7.62
4	=	10.16
5	=	12.70
6	=	15.24
1 Foot	=	30.48

Pounds to Kilograms

Pounds		Kilograms
1	=	0.45359
5	=	2.26796
10	=	4.53592
50	=	22.6796
100	=	45.3592

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